

2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico



5-03-01





### **2025 SOCIOECONOMIC FORECASTS**

# BY DATA ANALYSIS SUBZONES FOR THE MID-REGION OF NEW MEXICO

Consisting of Bernalillo, Sandoval, Torrance, Valencia, and Southern Santa Fe Counties in New Mexico

April 2003

Mid-Region Council of Governments of New Mexico 317 Commercial NE, Suite 104, Albuquerque, New Mexico 87102

#### TABLE OF CONTENTS

	PAGE
PART 1: EXECUTIVE SUMMARY	<u>1</u>
Overview	
Population	
Employment	
PART 2: METHODOLOGY	
Background	
Demographic and Economic Control Totals	
Land Use Plan	
Land Use Analysis Model	
PART 3: FORECAST OF POPULATION TO COU	NTIES
PART 4: HOUSEHOLDS, POPULATION IN HOU	SEHOLDS
AND HOUSING FORECASTS TO COUNTI	
Introduction	<u> </u>
Population in Households	
Households	
Housing Units	
PART 5: EMPLOYMENT AND EMPLOYED RES	IDENTS 40
Introduction	<u>1DEN1540</u>
Employment	
Short-range Employment Forecast, 20	00 - 2006
Long-range Employment Forecast, 20	
<b>Employment Forecast for Counties</b>	
Employed Residents	
PART 6: FORECAST OF POPULATION, HOUSIN	NG AND
EMPLOYMENT ON TRIBAL LANDS	
PART 7: FORECAST FOR KIRTLAND AIR FORC	CE BASE75
PART 8: FORECAST OF OTHER VARIABLES	78
Income	
School Variables	
UNM	
TVI	
FLOUDE	
FIGURES  MRCOC Parism	2
1 MRCOG Region	2
2 ZUZJ PUICCASI DAHU USC. WINCUCI KERIOI	1

3	2025 Forecast and 1970 and 2000 Population for Counties	. 7
4	2025 Forecast and 2000 Employment for Counties	8
5	Percentage of Regional Growth by County	. 9
6	Subareas of the MRCOG Region	
7	2000 Population and 2025 Forecast by Subareas	
8	2000 Total Employment and 2025 Forecast by Subareas	
9	Labor Force Participation Rates 1971 – 2025	
TABLES		
1	Population by County, 1950 – 2025	
2	Employment by County, 1980 – 2025	13
3	Method for Evaluating Vacant, Agricultural and Range land Parcels	20
4	Method for Evaluating Currently Developed Parcels	. 22
5	Population Projections by County	
6	Santa Fe County and Southern Santa Fe County	
7	Summary of Population Projections for Southern Santa Fe County, 20 2025	
8	Historical and Projected SPDD3 and MRCOG Region Population, 196 2025	
9	Historical and Projected Rates of Growth for SPDD3 and MRCOG Repopulation, 1960 – 2025	egion
10	Population, Population in Group Quarters and Group Quarters Percent	
10	1960 – 2000 for MRCOG Region	
11	Population, Population in Households, Population in Group Quarters a	
	Group Quarters Percentage 2000 – 2025 for MRCOG Region	
12	Forecast Population in Households by County	
13	Average Household Size by County	
14	Projected United States Average Household Size	
15	MRCOG Region Projected Average Household Size	
16	Forecast Households by County	
17	Forecast Average Household Size by County	
18	Forecast Housing Units by County	
19	Multifamily Housing Units as a Percentage of Total Units by County, 2000	1970 -
20	Net Change in Type of Housing From Census to Census, 1970 – 2000	
21	Housing Units by Type, 1970 – 2025	
22	Housing Units by Type, 1970 – 2025: Bernalillo County	
23	Housing Units by Type, 1970 – 2025: Sandoval County	
24	Housing Units by Type, 1970 – 2025: Torrance County	
25	Housing Units by Type, 1970 – 2025: Valencia County	
26	Housing Units by Type, 1970 – 2025: Valencia County	
27	Calculation of Employment by County for March 2000	
28	BBER Nonagricultural and Military Employment Forecast, 2001 –	, <i>⊤∠</i>

	2006	44
29	Albuquerque MSA Total Employment, 2001 – 2006	46
30	State Planning and Development District 3 Total Employment 2001 –	
	2006	46
31	Forecast Employment 2000 – 2006: MRCOG Region	47
32	Forecast Employment Percentage Distribution 2000 – 2006: MRCOG	• ′
J <b>_</b>	Region	48
33	Method 1: Projected Employment to 2025	50
34	Method 2: Projected Employment to 2025	51
35	Method 3: Projected Employment to 2025	51
36	Summary of Methods and Calculation of Total Employment	52
37	Forecast Employment to 2025	53
38	Percentage of Employment by County, 1980 – 2000	55 54
		55 55
39	Forecast of Employment for Bernalillo County to 2025	
40	Labor Force Characteristics, SPDD3, 1980 – 2000	57
41	Median Age and Percentage of Population Age 65 and Over	58
42	Summary of Regional Forecast of Employed Residents	60
43	Ratios Related to the Regional Forecast of Employed Residents	60
44	Consistency of Forecasts of Employment and Employed Residents	62
45	Employment Forecast to 2025 for the MRCOG Region	
46	Employment by County for Mid-Region of New Mexico	
47	Employment by County – Percentage of Region	
48	Employment by Sector – Mid-Region of New Mexico	
49	Employment by County by Sector: Bernalillo County	
50	Employment by County by Sector: Sandoval County	
51	Employment by County by Sector: Torrance County	65
52	Employment by County by Sector: Valencia County	65
53	Employment by County by Sector: Southern Santa Fe County	66
54	Ratios of Population to Employment Type by County: Bernalillo	
	County	66
55	Ratios of Population to Employment Type by County: Sandoval	
	County	66
56	Ratios of Population to Employment Type by County: Torrance	
	County	.67
57	Ratios of Population to Employment Type by County: Valencia	
	County	67
58	Ratios of Population to Employment Type by County: Southern Santa	Fe
	County	
59	Ratios of Population to Employment Type: Mid-Region of New	,
	Mexico	68
60	Employment by Type by County	
61	Forecast Population on Tribal Lands	
62	Employment on Tribal Lands by SIC Sector	. 70 71
63	Population for Indian Tribal Areas and Trust Areas, 1970 – 2025	
64	Housing Units for Indian Tribal Areas and Trust Areas, 1970 – 2025	
65	Employment for Indian Tribal Areas and Trust Areas, 1980 – 2025	
UJ	Employment for mulan Tribal Areas and Trust Areas, 1995 – 2025	/4

66	Kirtland Air Force Base Population, Housing, and Employment	
	1980 – 2000	75
67	Comparison of Persons per Households for Kirtland Air Force Base	and
	MRCOG Region	76
68	Forecast of Population in Households	76
69	Forecast of Population, Housing, and Employment, Kirtland Air	
	Force Base	77
70	Forecast Public School Enrollment by School Type	81
71	Forecast Enrollment for UNM	82
72	Forecast Enrollment for TVI	83

#### **APPENDICIES**

#### **APPENDIX A**

Data Analysis Subzones for the MRCOG Region

#### **APPENDIX B**

2000 Socioeconomic Data Set for Data Analysis Subzones

#### APPENDIX C

Forecast 2025 Socioeconomic Data Set for Data Analysis Subzones

#### **APPENDIX D**

Population, Housing, and Employment Change by Subareas of MRCOG Region

#### 2025 SOCIOECONOMIC FORECASTS

#### PART 1

#### **EXECUTIVE SUMMARY**

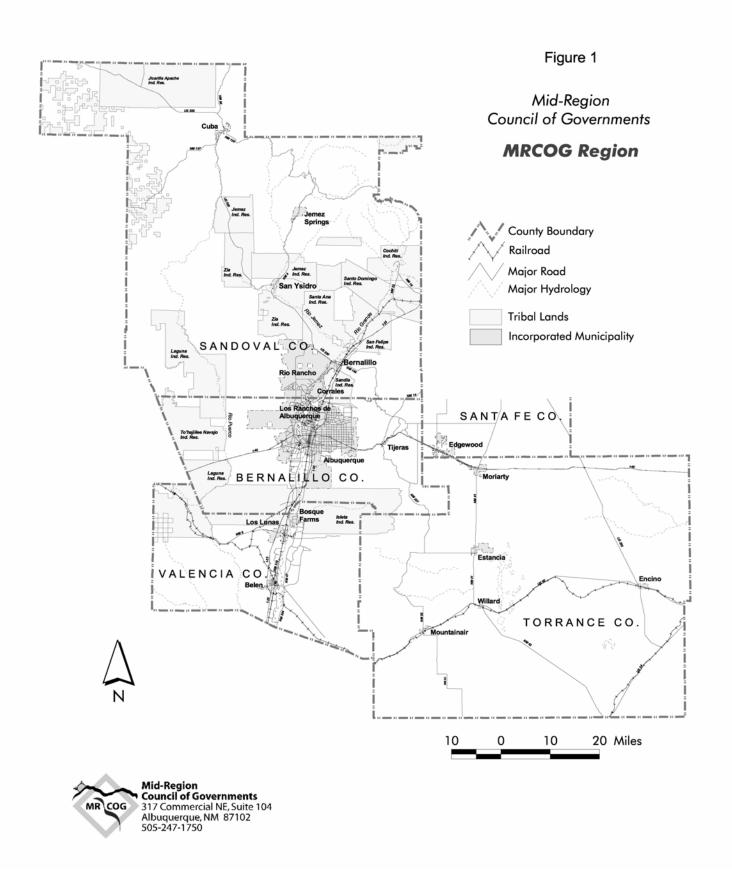
#### **OVERVIEW**

A series of socioeconomic forecasts to 2025 has been prepared by the Mid-Region Council of Governments (MRCOG). The forecasts are primarily to provide inputs into the regional transportation model operated by MRCOG (formerly MRGCOG) and to support the regional and local planning activities of MRCOG. The data is available to other agencies for appropriate planning applications. The forecast area included the four counties of State Planning and Development District 3 (Bernalillo, Sandoval, Torrance, and Valencia) as well as southern Santa Fe County (FIGURE 1). Forecast data is provided for Data Analysis Subzones (DASZ), maps of the DASZ system are in the Appendix as well as on the MRCOG website, <a href="www.mrcog-nm.gov">www.mrcog-nm.gov</a>. DASZ data sets have been prepared for 2000, 2005, 2010, 2015, and 2025. The 2000 and 2025 data sets are contained in the Appendix of this report. All of the data sets are available on the MRCOG web site.

This series of forecasts was developed as part of the 2025 Metropolitan Transportation Plan (MTP) for the Albuquerque Metropolitan Planning Area (AMPA). As the MTP set of forecasts, this series is the base case scenario for transportation planning. The adoption of a base case set of forecasts does not preclude other scenarios which, in the future, may be developed to test the effects of specific projects or proposed changes in policy.

This report summarizes the forecast to 2025 and describes the methodology for generating the forecast series. In generating this report, MRCOG relied on a great deal of data that had been developed by other agencies. The population forecast was based on the August 2002 county projections by the University of New Mexico Bureau of Business and Economic Research (BBER). Employment forecasts were based on the April 2002 employment forecasts by BBER and data from the Regional Economic Models, Inc (REMI) Policy Insight model jointly owned by MRCOG, the City of Albuquerque, the New Mexico State Land Office, and Bernalillo County. Historical data was primarily obtained from the U.S. Bureau of the Census, the New Mexico Department of Labor, and MRCOG archives.

This series of forecasts was developed over many months with numerous future land use alternatives. There was considerable professional and public input into the discussions of the various alternatives and scenarios for the future. The Regional Plan, accepted by the MRCOG Board of Directors in 2000 established a general framework for the direction in which development in this region should be moving. During the process,



MRCOG staff met with planning directors or other representatives of each of the counties and municipalities within the region to obtain data on local zoning, growth patterns, and a sense of where development would most likely occur. In addition, MRCOG staff interviewed as many of the major developers and land owners as would agree to discuss their developments or plans for future developments. MRCOG closely tracked development and subdivision cases that were submitted to local planning agencies in Albuquerque and Bernalillo County. Outside of Bernalillo County there were repeat contacts with planning directors in growth areas. Since 1990, MRCOG has collected all building permits for new construction in the region and has geo-coded the permits to DASZ to track the land use development patterns. Wherever possible, MRCOG has collected the zoning maps and comprehensive plans of the municipalities and counties. MRCOG staff has also met with officials of most of the school districts to discuss plans for locations of future schools. MRCOG has also tracked the development of major planning activities including the Planned Growth Strategy in Albuquerque and the new comprehensive plan in Rio Rancho. All of this data was brought into the Land Use Analysis Model (LAM) to produce future year land use scenarios. MRCOG staff calibrated LAM on historical data from the greater Albuquerque area from 1973 to 1996 which caused LAM to treat all of the input data in the context of local land development history. The forecast is a composite of local historical development trends, official plans for the future as embodied in regional, comprehensive and master plans, and development proposals by the development community.

Highlights of the forecast from 2000 to 2025 include:

- An increase of 336,514 persons, a 45.6 percent increase;
- An increase of 162,377 housing units, a 52.5 percent increase;
- An increase in employment of 159,098, a 40.5 percent increase;
- An increase in the median age of the population from 34.9 years to 40.3;
- An increase in the over age 65 population of 157.2 percent;
- A decline in the percentage of employed persons 16 and over from 60.8 percent to 59.1 percent;
- A decline in average household size from 2.55 to 2.42;
- An increase in households of 52.6 percent; and
- An estimated 47 percent increase in the amount of land used for residential, commercial, industrial, and institutional uses from approximately 197,000 acres to 290,000 acres (excludes agricultural uses).

This forecast was developed as a land use forecast. The major advantage to this approach was to insure that the projected densities would be reasonable and appropriate so that excessive development would not be forecast for a DASZ. In addition, the use of a land use allocation method insured that the proposed development was consistent with the zoning, proposed zoning or proposed land uses for the area. Finally, forecasting based on land use allowed the forecast to be sensitive to the spatial relationships of various types of land use. It is emphasized that the land use is generalized and based on a grid with cells that are approximately one-quarter acre; the land use forecast should not be viewed as a forecast for land parcels. It should also be understood that in forecasting future land use, the location of specific uses may in many cases be approximate and

should not necessarily be associated with an actual parcel of land. A representation of the forecast land use in the core of the Region is presented in FIGURE 2. Population forecast by county is displayed in FIGURE 3. The employment forecast is displayed in FIGURE 4.

#### **POPULATION**

MRCOG used the BBER county level forecasts for Bernalillo, Sandoval, Torrance, and Valencia Counties as the basis for this series of forecasts. MRCOG added a forecast for the southern portion of Santa Fe County to complete the forecast for the MRCOG Region. Population for the Region is expected to increase by 46 percent to 1,075,238. This would be an average annual growth rate of 1.5 percent. The projected growth rate is somewhat slower than the 2.4 percent average annual rate of growth in this Region over the past 30 years.

Sandoval County has been the most rapidly growing county in the Region over the past 30 years, and is expected to continue to be the most rapidly growing through 2025. The partial county of southern Santa Fe, however, has exceeded the growth rate for Sandoval. Over the next 25 years, southern Santa Fe is expected to continue to grow more rapidly than Sandoval County.

Population growth by county since 1950 is provided in TABLE 1, along with the forecast to 2025. It shows that growth has been strong throughout the second half of the 20<sup>th</sup> century. The decade of the 1960's was the only period where the Region grew by less than 100,000 persons, and even in that decade the Region still added 60,000.

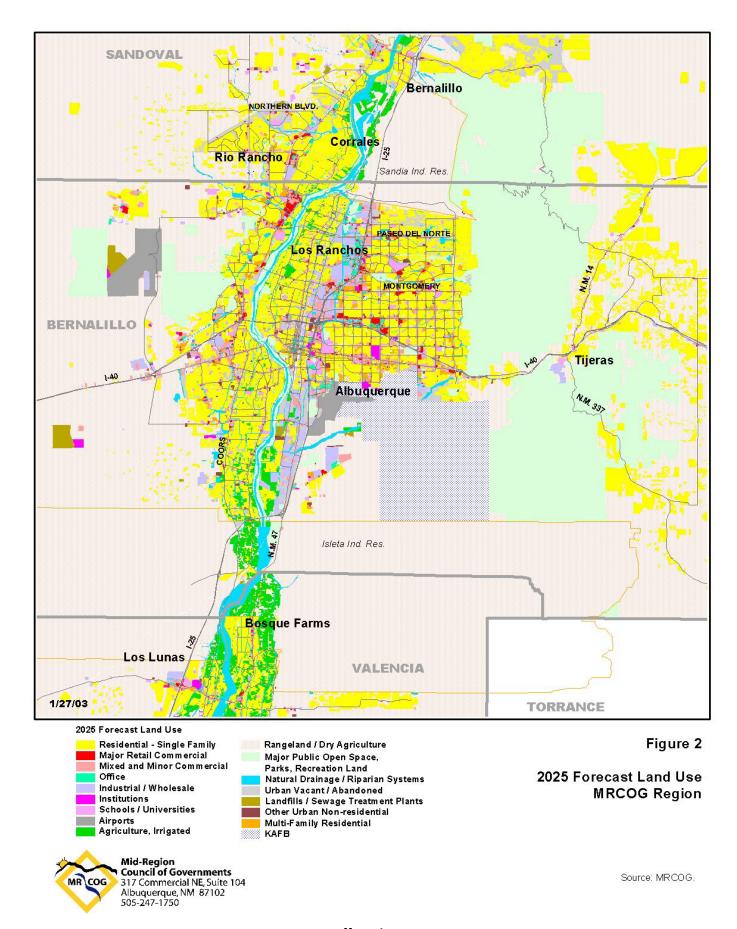
TABLE 1
POPULATION BY COUNTY 1950 – 2025, MRCOG REGION

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern Santa	MRCOG
	County	County	County	County*	Fe County**	Region
1950	145,673	12,438	8,012	13,530	200	179,853
1960	262,199	14,201	6,497	16,146	263	299,306
1970	315,774	17,492	5,290	20,451	296	359,303
1980	419,700	34,799	7,491	30,769	1,185	493,944
1990	480,577	63,319	10,285	45,235	3,700	603,116
2000	556,678	89,908	16,911	66,152	9,065	738,714
2005	595,954	108,538	19,523	76,512	11,363	811,890
2010	631,839	126,294	21,690	86,708	13,771	880,302
2015	666,114	144,377	23,475	97,330	16,206	947,502
2020	698,832	162,409	24,979	108,064	18,538	1,012,822
2025	729,750	179,998	26,318	118,593	20,579	1,075,238

Sources: U.S. Bureau of the Census, UNM-BBER, and MRCOG

<sup>\*</sup> Populations for the current boundaries of Valencia County prior to 1990 were estimated.

<sup>\*\*</sup> Populations for southern Santa Fe County prior to 1990 were estimated.



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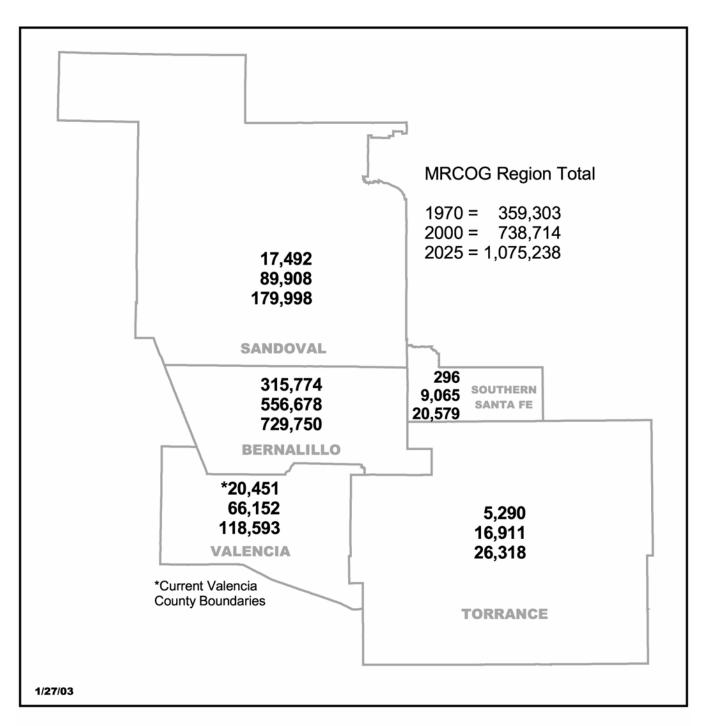
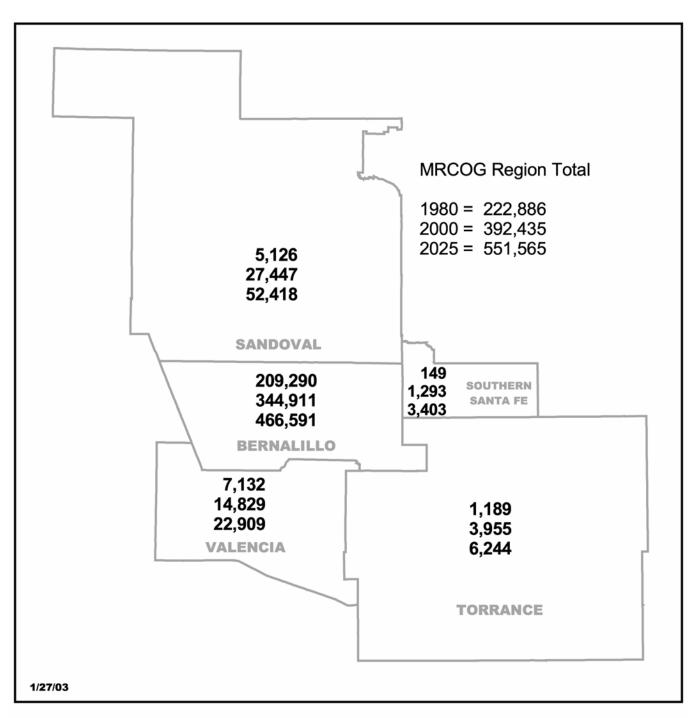


Figure 3

2025 Forecast and 1970 and 2000 Population MRCOG Region



Source: U.S. Bureau of the Census, UNM-BBER, and MRCOG.



Total employment includes estimates of military, agricultural, and self-employment.

Figure 4

2025 Forecast and 1980 and 2000 Estimated Total Employment MRCOG Region



Source: NM Dept. of Labor, U.S. Bureau of the Census, and MRCOG.

It is informative to analyze the amount of change in each county to see patterns in growth. FIGURE 5 displays the percentage of regional growth for each county from 1970 through the forecast year of 2025. The percentage of the regional population growth captured by Bernalillo County has declined over time and is expected to continue to decline. In the last decade, Bernalillo County captured 56 percent of the regional growth. By 2025, it is forecast that the Bernalillo County share of the regional growth will be 49.5 percent. The principal beneficiary is expected to be Sandoval County, which is expected to increase its share of growth from 19.6 percent over the last decade to 28.2 percent in the 2020 to 2025 period. Over the next 25 years, Bernalillo County will continue to grow but an increasing amount of the regional growth will occur in the other counties.

100% 80% Percent of Growth ■ SoSantaFe Valencia 60% ■ Torrance 40% Sandoval Bernalillo 20% 0% 1970- 1980- 1990- 2000- 2005- 2010- 2015- 2020-80 90 00 05 10 15 20 25 **Period** 

FIGURE 5
PERCENTAGE OF REGIONAL GROWTH BY COUNTY

Sources: U.S. Bureau of the Census, UNM-BBER, and MRCOG

The distribution of population growth can be seen more clearly by examining subareas of the Region. MRCOG has divided the Region into 28 subareas that respect county boundaries. A map of the subareas is provided in FIGURE 6. Population for 2000 and 2025 for each subarea is provided in FIGURE 7.

The largest population growth is expected in subarea 1 (Northern Rio Rancho), subarea 26 (Valencia County), subarea 10 (Albuquerque's Southwest Mesa), and subareas 7 and 5 (Albuquerque's Northwest Mesa). The major growth is occurring in areas that have developable land near existing development. Much of the new residential development is expected to occur in master planned areas, or planned communities.

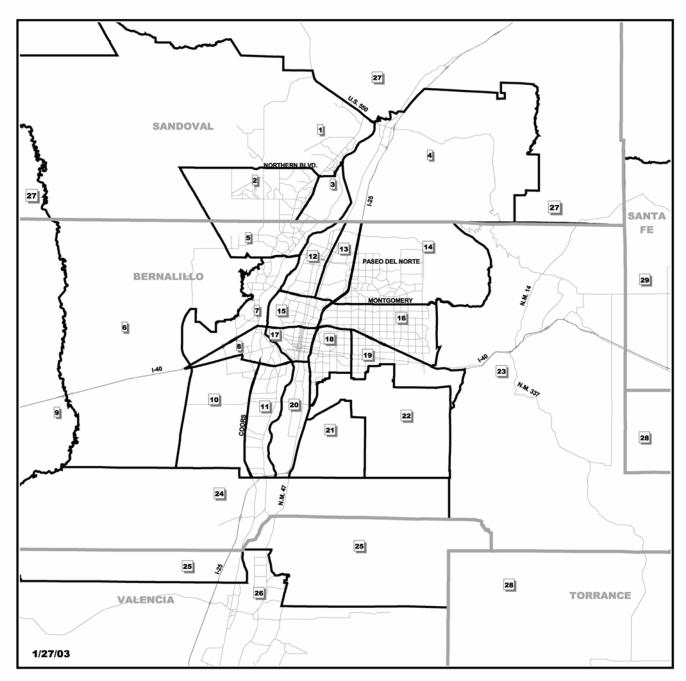


Figure 6
Subareas of the MRCOG Region

22 Subarea Identification Number



Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

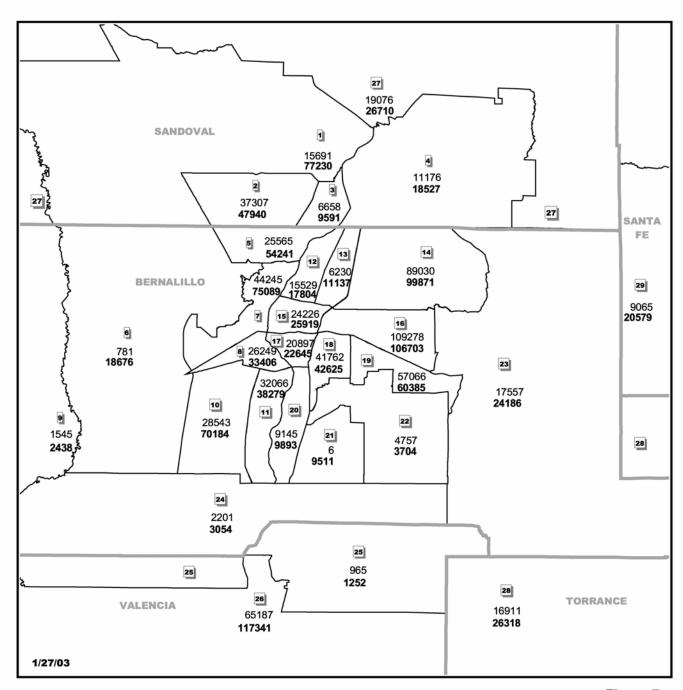


Figure 7

Total for MRCOG Region: 2000 = 738,714

2000 = 738,714 2025 = 1,075,238 Subarea Number

4420 2000 Population

5500 2025 Forecast Population

2000 Population and 2025 Forecast by Subareas of the MRCOG Region



Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

Sources: U.S. Bureau of the Census and MRCOG.

In addition to the major development expected on vacant lands, MRCOG is expecting a significant amount of infill residential development as well as redevelopment of older areas. The City of Albuquerque is investing a great deal of effort in promoting infill and redevelopment with the Centers and Corridors Comprehensive Plan Amendment and the recently adopted Planned Growth Strategy. Implementation committees have been established to guide and ensure that the goals of the Planned Growth Strategy will be accomplished. The infill and redevelopment is primarily expected in the valley including the Downtown area, the UNM/TVI area, the Nob Hill area, the east Central area, and the west Central area. This expectation of infill and redevelopment resulted in solid growth in subareas 8, 11, 12, 13, 15, 17, 18, and 19.

The rural areas of the East Mountains of Bernalillo County, the Edgewood area, and the Moriarty area are also expected to see significant growth in terms of percentage growth. While the amount of growth in these areas may be less, the impact could be considerable due to the percentage increase. Population is also expected to continue to increase on the Tribal Lands.

Some areas will experience a population loss. Generally these are areas with little or no vacant land, and the existing development is unlikely to be redeveloped within the 25-year frame of this forecast. Areas that cannot increase in housing units will probably lose population as a result of a declining household size. Subarea 16 in the lower Northeast Heights contains many such neighborhoods and this subarea is expected to decline in population. Kirtland Air Force Base in subarea 22 is also expected to lose population as a result of the razing of a large number of deteriorated housing units. There will be new units constructed on the Base, but at this time the projection is that fewer units will be built than the number razed.

#### **EMPLOYMENT**

MRCOG developed county level forecasts of employment based on employment forecasts by BBER and from the REMI model. LAM was used to allocate county forecasts to DASZs. Employment as defined for this series of forecasts as a count of jobs, including self-employment and agriculture. Therefore, the count for employment may be higher than in some other tabulations of employment, which count employed persons rather than jobs, or count tabulations that exclude agricultural employment or exclude self-employment. Historical and forecast employment is provided in TABLE 2.

Employment continues to be concentrated in Bernalillo County. In 1980, 94 percent of the Region's employment was within Bernalillo County. In 2000, Bernalillo County's portion of the Region had declined to 88 percent. It is projected that by 2025, Bernalillo County will account for 85 percent of the Region's employment. Sandoval and Valencia County are increasing in employment share, however, in recent years the growth in share for these two counties has slowed. Based on recent trends, the forecast is for slightly less decline in Bernalillo County's share of employment over the next 25 years than what has been seen over the past 20 years.

TABLE 2 EMPLOYMENT BY COUNTY 1980 - 2025, MRCOG REGION

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern Santa	MRCOG
	County	County	County	County*	Fe County**	Region
1980	209,290	5,126	1,189	7,132	149	222,886
1990	271,670	11,185	2,060	9,124	294	294,333
1995	302,649	21,463	2,581	12,453	470	339,616
2000	344,911	27,447	3,955	14,829	1,293	392,435
2005	371,846	32,674	4,856	16,338	1,617	427,331
2010	402,563	38,249	5,325	18,171	1,985	466,293
2015	425,102	42,967	5,689	19,756	2,420	495,934
2020	446,121	47,659	5,975	21,326	2,903	523,984
2025	466,591	52,418	6,244	22,909	3,403	551,565

Sources: New Mexico Department of Labor, UNM-BBER, and MRCOG

Forecast employment change by subarea is provided in FIGURE 8. The most increase in employment occurred in subarea 1 (Northern Rio Rancho), subarea 6 (Bernalillo County's Far West Mesa), subarea 7 (Albuquerque's lower Northwest Mesa), and subareas 14 and 13 (North I-25 Corridor). Rio Rancho is actively promoting industrial and commercial growth along U.S. 550 and NM 528 in Northern Rio Rancho, and all indications point to this area attracting employment growth. This forecast assumed the success of the Eclipse Aviation plant as well as the ability of the proposed planned communities to balance employment growth with housing growth on Bernalillo County's Far West Mesa. Employment growth on the Northwest Mesa and in the North I-25 Corridor is a continuation of the development that is occurring today.

There is also solid employment growth expected in Southern Rio Rancho, the Cottonwood area, and Valencia County; much of this growth is employment to serve the existing and growing population. There is also anticipated employment growth on Albuquerque's Southwest Mesa to serve the expanding population and to take advantage of proximity to I-40. Infill and redevelopment is expected to provide substantial growth in Downtown Albuquerque, the UNM/TVI area, Uptown, east Central, and west Central. This forecast also assumes that the proposed development at Mesa del Sol will attract employment as well as housing. The Tribal Lands in Sandoval and Bernalillo County should also continue to attract considerable increases in employment.

There is also growth anticipated that is locally significant. These are areas that may not generate as much growth as more urbanized areas of the region but should experience considerable percentage increases in employment. Chief among these are the East Mountains of Bernalillo County, the Edgewood area, and the Moriarty area.

<sup>\* 1980</sup> employment for the current boundaries of Valencia County was estimated.

<sup>\*\*</sup> Employment for southern Santa Fe County prior to 1995 was estimated.

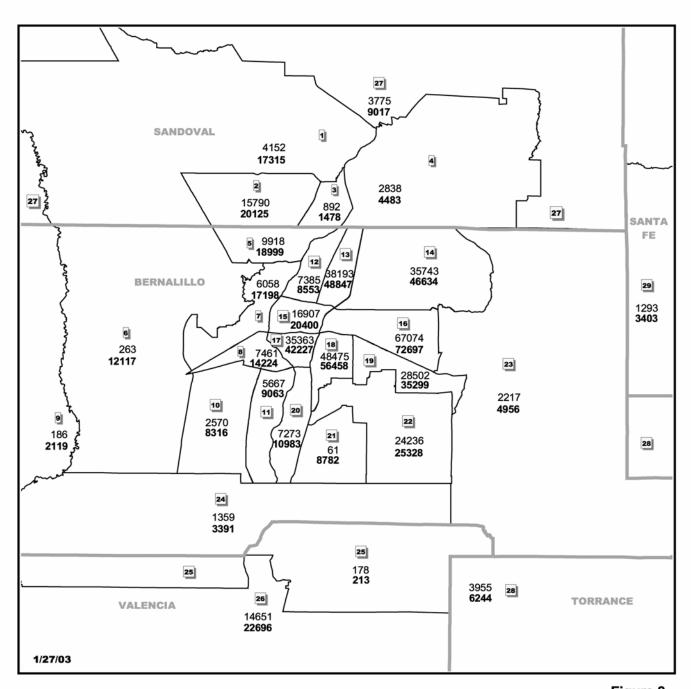


Figure 8

Total for MRCOG Region: 2000 = 392,435

2025 = 551,565

22 Subarea Number

4420 2000 Employment

5500 2025 Forecast Employment

2000 Total Employment and 2025 Forecast by Subareas of the MRCOG Region



Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

Source: NM Dept. of Labor and MRCOG.

#### PART 2

#### **METHODOLOGY**

#### BACKGROUND

DASZ forecasts generated by MRCOG (formerly MRGCOG) have long been based on land use data and land use assumptions. Land use is still at the core of the DASZ forecasts. This Part describes the methodology for generating the 2025 MTP forecast for DASZs. The forecast methodology required demographic and economic control totals for the region or the various counties, MRCOG generated some of the regional and county totals. Subsequent Parts of this report describe the MRCOG methodology for the generation of the required control totals.

Since the development of the 2020 MTP, the geographic information system (GIS) capabilities of the Council of Governments have increased allowing MRCOG to more fully incorporate land use forecasts into the development of the socioeconomic data sets. The principal tool acquired by the Council of Governments was the Land Use Analysis Model (LAM) which was developed by Planning Technologies as part of the Focus 2050 project. The Land Use Analysis Model was documented in Socioeconomic Forecasts for Development of the 2025 Metropolitan Transportation Plan, TM-128 on pages 37 through 56 published in April 2001. LAM was built as an allocation model which required regional demographic and economic inputs along with an input land use plan.

Development of the 2025 MTP forecast data sets began in early 2000 when MRCOG prepared population and employment allocations for subareas of the Region. Two scenarios were prepared, one based on a forecast by the University of New Mexico Bureau of Business and Economic Research (BBER) and the other based on the Regional Plan. The land use allocations for both scenarios were reviewed by local planners representing the governments within the AMPA. The comments were directed toward the underlying assumptions as well as the ramifications of the forecast in the horizon year of 2025.

Comments from the first subarea allocations were incorporated in the development of two forecast scenarios that were produced later in 2000. These scenarios were prepared with Data Analysis Subzone (DASZ) data sets which allowed for transportation and air quality modeling. This modeling was done on the previous version of the MRCOG Transportation Model.

During the first half of 2001, MRCOG staff took the land use plans for these two scenarios to the local governments throughout the region for review, comment, and critique. Staff met with all governments within the Transportation Modeling Area and some governments in the Region but outside the Modeling Area. These meetings were with planners, zoning officials, councilors, and mayors. Council of Governments staff presented existing and forecast land use maps to the local government representatives for

their respective county or community. These meetings were discussions but there were at least five questions covered in each meeting which were: 1) Is either scenario a reasonable expectation as to how the community is likely to grow? 2) Is there growth forecast in an area where it is unlikely? 3) Is growth likely in an area where it is not forecast? 4) Can infrastructure be extended to areas where growth is projected? 5) How do the scenarios compare with the adopted plans and the current planning that is occurring in the community?

There were several other major events in 2001 that affected this project. 1) In March, MRCOG completed the disaggregation of the Department of Labor employment file to produce an employment data set for March 2000 at the DASZ level. 2) In late March, the Bureau of the Census released the Public Law File which contained block level population data from the 2000 Census. 3) In late summer, the Bureau of the Census released Summary File 1 which contained extensive data on the age distribution of the population, household size, and household composition. The Council of Governments used the newly available employment and population data and comments from review of the two forecast scenarios to construct a third forecast scenario which was really a set of scenarios. The third general land use scenario was an effort to merge assumptions and comments from the first two scenarios since the ultimate goal was to produce a single scenario. Within this third general scenario were four distinct scenarios, each with a unique forecast data set. Each of the data sets contained slightly different assumptions regarding future land use patterns. These data sets were subjected to transportation analyses which were reviewed by technical staff.

By late 2002, MRCOG staff had prepared, analyzed, and presented six scenarios for future growth in this Region. MRCOG staff moved the process toward an assimilation of the information gathered from the six scenarios to develop a preferred alternative. MRCOG prepared a fourth general land use scenario to develop a proposed preferred alternative. This general land use scenario was the basis for the seventh scenario which is presented in this report. As the seventh scenario was developed, there were modifications to accommodate new information up until mid-December of 2002.

During 2002, there were several events which impacted and shaped this seventh scenario. 1) MRCOG received Summary File 3 from the Bureau of Census which provided additional information regarding employment, income, and housing type. 2) In August, BBER completed a new forecast of population by county based on the 2000 Census. 3) Compromises between several divergent groups in the Albuquerque community were accomplished and the City of Albuquerque adopted a modified Planned Growth Strategy. 4) The City of Rio Rancho adopted a new Comprehensive Plan with a detailed land use plan.

In late summer 2002, while analysis of previous scenarios were still under way, MRCOG began developing a fourth general land use scenario which would be the basis for the seventh scenario. The third general land use scenario was modified with new information regarding new development proposals, new census data, new county forecasts, and revised land use plans from Albuquerque, Rio Rancho and elsewhere in the

Region. Information from the transportation analysis of the previous scenarios was incorporated into the development of this scenario primarily through modifications of the transportation networks input to the LAM model.

#### DEMOGRAPHIC AND ECONOMIC CONTROL TOTALS

MRCOG generated DASZ forecasts by disaggregating regional and county forecasts to the DASZ level relying on land use data. The variables to be forecast were dictated by the inputs required for the MRCOG Transportation Model. In some cases, there were county forecasts available for the appropriate variable. In many cases, MRCOG staff were required to forecast the regional and county totals for the appropriate variables.

Population, housing, and employment control totals were generated by MRCOG from several sources. These control totals were required inputs to LAM as well as necessary data for constructing the socioeconomic data sets. At a minimum, LAM required regional totals for housing by type and employment by Standard Industrial Classification (SIC) sector. Experience with LAM has shown that the quality of the LAM output can be improved by providing LAM with sub-regional control totals. These sub-regional control totals may be for counties or subareas within counties. The seventh scenario for the 2025 MTP was run in LAM using a combination of county control totals and control totals for Tribal Lands within counties.

As noted, MRCOG has significantly improved its forecasting capabilities since development of the 2020 MTP. Clearly a major component was the development of LAM. In addition, MRCOG with the City of Albuquerque, Bernalillo County, and the New Mexico State Land Office purchased the Regional Economic Models, Inc. (REMI) Policy Insight Model. The model is for the four-county State Planning and Development District 3 (SPDD3) which is composed of Bernalillo, Sandoval, Torrance, and Valencia Counties. The REMI model is calibrated on local economic data beginning in 1969 and updated annually. It generates forecasts by SIC sector to 2035 which enhances the MRCOG staff capability to develop the economic inputs to LAM.

The Council of Governments continues to rely on the University of New Mexico Bureau of Business and Economic Research (BBER) for population and short-term economic forecasts. BBER produces long-range forecasts of population by county, currently there are county population forecasts to 2030. BBER also produces short-term economic forecasts for the Albuquerque Metropolitan Statistical Area (MSA). The most recent BBER forecast at the time the 2025 MTP forecast was developed was to 2006. The MSA economic forecasts are not disaggregated to counties.

Council of Governments staff generated population control totals for the MRCOG Region from BBER forecasts. The BBER forecasts were for counties. MRCOG added a forecast for southern Santa Fe County which did incorporate the BBER forecast for Santa Fe County. The sum of the BBER forecasts for Bernalillo, Sandoval, Torrance and Valencia Counties with the MRCOG forecast for southern Santa Fe County provided a

regional population control total. The methodology for developing this regional control total is provided in Part 3 with the county control totals from BBER.

Housing by type was required as an input to LAM. In addition, households and population in households (household population) are both variables required in the MRCOG Transportation Model. Control totals for these variables were derived from the adjusted population forecasts, historical relationships, and national forecasts. The process is documented in Part 4.

Several employment variables are required for the MRCOG transportation model. It is important to note that the transportation model is calibrated on a definition of employment which includes agricultural employment, self-employment, and military enlistment. MRCOG staff developed the appropriate employment variables to input to LAM to generate the employment variables for the transportation model. The employment control totals were developed by MRCOG staff from BBER and REMI forecasts. The methodology for developing employment control totals is discussed in Part 5.

The Council of Governments does not forecast land use on Tribal lands and Kirtland Air Force Base (KAFB). Socioeconomic variables, however, are still required to be forecast for both Tribal lands and KAFB. Housing and employment on Tribal and KAFB lands were excluded from the totals input to LAM. It was necessary to forecast population, housing and employment for these areas in order to exclude the data from county totals prior to the input to LAM. The population, housing, and employment forecasts for Tribal lands and KAFB were then added to the output from LAM to produce a complete socioeconomic data set. Part 6 contains the description of the methodology for the forecast of population, housing and employment on Tribal Lands. Part 7 presents the methodology for projecting the variables for Kirtland Air Force Base.

#### LAND USE PLAN

The Land Use Analysis Model (LAM) requires an ArcView shape file containing the potential future land use by category and intensity. There are 18 land use categories. Each polygon in the shape file has an option for housing density and an option for employment density. Polygons are contiguous areas within the same DASZ that have the same generalized land use and can therefore be characterized by a single land use code. Polygons can be any shape or size. Generally, polygons contain numerous legal parcels of land.

There are several shape files input to LAM, among these input files is a file representing the existing land use; a file containing known or highly likely development called the known layer; and, a file containing the future land use plan called the plan file. Polygons in the plan file that differ from the existing land use are recognized by LAM as areas of potential development or redevelopment.

The future land use plan is made up of both the known file or known layer (shape file) and a potential development layer or plan file (shape file). The known layer is given precedence in the allocation. Projects that are currently being developed or certain of development are placed in the known layer. The plan layer contains all the future possible projects and is developed from a variety of sources. The plan must contain the potential for more development than is allowed in the projection year so that the allocation can choose where to allocate development. LAM then allocates to the potential development and redevelopment areas.

The input shape files were made up of polygons. LAM operates on a grid, therefore, the polygons in the shape files were converted to cells based on a 100-foot grid (approximately one-fourth acre). Each cell contained only one land use code along with two density values: one for housing and one for employment. The assignment of land use codes for the plan layer and the known layer was based on the following sources listed in order of preference: development proposals, adopted plans, existing zoning, current planning, and adjacent land uses.

Development proposals included both private and public sector proposals for actual construction. Adopted plans included comprehensive plans, area plans, sector plans, and master plans. Master plans tended to be generated from the private sector while the other plans were generally developed by one or more local governments. Existing zoning included areas that were currently subject to zoning and were zoned for an activity other than agriculture. Current planning included planning activities that municipal and county planning departments were engaged in or promoting. Areas that did not have a current zoning (other than agriculture) and were not included in any plan known MRCOG were evaluated based on adjacent land uses.

The criteria used to build the land use plan layer and the known layer are summarized in TABLE 3 and TABLE 4. The beginning point for the construction of these plan layers was the existing land use file which was made up of approximately 30,600 polygons representing land use as of April 2000. Polygons coded on the existing land use file as vacant, as agricultural, or as rangeland were evaluated and coded on the future land use layers using the steps in TABLE 3. In the evaluation, polygons could be divided into two or more new land use polygons. Polygons coded on the future land use layers contained a projected land use code and density. Polygons that were coded on the existing land use file as developed for residential, commercial, industrial, or institutional were considered to be available for at least the possibility of redevelopment. For purposes of LAM, redevelopment was defined as a change in land use. Redevelopment was evaluated using the steps in TABLE 4. Each table describes the steps for evaluating the polygons. The process began with the first step, at the point at which a step applied to a selected polygon, the appropriate action was taken and the next polygon was evaluated.

# TABLE 3 METHOD FOR EVALUATING VACANT, AGRICULTURAL AND RANGELAND POLYGONS FOR BUILDING THE LAND USE PLAN

Step		Type of Information Available	Action
Step 1	•	Type of Information Available  A project is currently under construction.  Site has been prepared and is ready for construction.  Subdivision has been completed and construction is reasonably certain given one of the following scenarios: this is a subsequent phase in an on-going development; the developer has other projects and this is a reasonable continuation of development elsewhere; there is adjacent activity similar to what is proposed so that there is considerable likelihood that the proposed project will be built.	Action Place in Known Layer with the stated land uses and densities.
2	•	An approved master plan exists in sufficient detail to subdivide a site or obtain a building permit.  Interviews with developers that have provided information on planned development including density where the developer is confident that the project will be built.	Enter the information in the Plan Layer with the stated land uses and densities.
3	•	Adopted General Plan and Regional Plan concepts and proposals including comprehensive plans that pertain to specific sites or areas.  Adopted Plans including Area Plans and Sector Plans that specify land uses and densities.	Specific land use and density data is entered into the Plan Layer. General concepts and proposals for specific sites or areas are referenced to be used to evaluate action in subsequent steps.
4	•	The existing zoning for a parcel is for a category other than an agricultural use and there is development activity or likely development activity in the general area of the parcel.	The land use for the zoning category will be placed in the Plan Layer. If there is a specific density provided on the zone map, that density will be used. If a density is not available, the density will be determined from existing densities for similar zoned parcels. In examining

		similar zoned parcels, preference is given to adjacent parcels. If there are no applicable adjacent parcels, then the density is taken from nearby similar zoned parcels.
5	<ul> <li>Planning for future land use or zoning are under development by local governments.</li> <li>Interviews with developers that have provided information on planned developments but the timing and certainty of the project is not known.</li> <li>Interviews with local government officials regarding the extension of infrastructure to provide for likely or proposed development.</li> </ul>	Specific land use and density data is entered into the Plan Layer if it is not in conflict with the adopted plans used in Step 3.
6	<ul> <li>A vacant or rangeland parcel has no zoning or is zoned for an agricultural use but it is</li> <li>Adjacent to a developing area;</li> <li>Accessible by arterials;</li> <li>It is located in an area proposed for development by a planning document in Step 3 or Step 5 but there was insufficient specificity to designate the parcel.</li> </ul>	Place in the Plan with the land use suggested by adjacent development, location, or a planning document. The density will be determined by the general densities in the area or the applicable planning document.
7	<ul> <li>An irrigated agricultural parcel meets one or more of the following criteria:</li> <li>The land has been subdivided;</li> <li>There is a special use permit for the parcel even though the parcel is still in agriculture;</li> <li>The parcel is surrounded by urban zoning or urban uses;</li> <li>The parcel is less than 5 acres;</li> <li>The parcel is adjacent to utilities; or</li> <li>The parcel is accessible from an adjacent street.</li> </ul>	If one or more of these criteria are met, the parcel may be added to the Plan Layer. Policies from the Plans in Step 3 and Step 5 will be considered in assessing the coding of these parcels. In areas where agriculture is proposed to be preserved but development is occurring, some parcels that meet the criteria may be randomly selected to be coded for potential development.

MRCOG staff was not compelled to code all vacant, rangeland, or agricultural parcels as a potential development category. Staff used information on the likely extent of utilities by 2025 as a limiting factor. For lands outside utility service areas, MRCOG considered past land absorption trends in the respective DASZ to determine a reasonable

amount of land to code into the Plan Layer. In general, there was an effort to not code lands in the Plan Layer as eligible for development if there was little or no reasonable opportunity for development by 2025 based on all the information available to MRCOG. Parcels that were known to have limitations to development and those limitations were not currently represented by a variable in the model were also not coded for potential development. An example of this latter category would be lands that had extreme topographic constraints.

TABLE 4
METHOD FOR EVALUATING CURRENTLY DEVELOPED PARCELS FOR
BUILDING THE LAND USE PLAN

Step	Criteria	Action
1	The parcel is in an area where redevelopment is	Consider for coding the Plan
	occurring or an area that has been targeted for	Layer with a different land
	redevelopment. Targeted areas can be identified	use or a higher density and
	by local government staff or by formal planning	move to step 2.
	processes such as the City of Albuquerque Centers	
	& Corridors Comprehensive Plan Amendment.	
2	The land value appears to be higher than the value	If step 1 was yes, then
	of the improvements.	proceed.
3	Lot size and configuration would be conducive to	If steps 1 and 2 were yes,
	redevelopment.	then proceed.
4	There is investment occurring or likely to occur on	If steps 1 through 3 were
	adjacent properties.	yes, then proceed
5	The land is vacant or partly vacant.	Make an informed judgment
		regarding the information
		collected from the criteria.

Coding for redevelopment was based on the five criteria listed in TABLE 4, but ultimately the coding of the Land Use Plan was based on a judgment informed by these five criteria. It was not reasonable that all land identified as redevelopment candidates from these criteria would be redeveloped by 2025. MRCOG staff with input from the staff of the respective local government along with these criteria made judgments as to which lands to code for a potential land use change.

The coding of the Land Use Plan has also been developed as an iterative process. Council of Governments staff developed, in early 2001, an initial 2025 forecast based on information that was available to MRCOG. The land use component of this initial forecast was reviewed with officials of all the local governments within the transportation modeling area. Comments from planning staff were incorporated in a complete revision of the land use plan. These comments were specifically included under Step 5 of TABLE 3 and as part of the evaluation of TABLE 4. The resulting Land Use Plan represented the best efforts by MRCOG to consolidate information as to likely or potential future land use for each polygon in the Plan. The land use evaluation was subject to change as new information became available. As noted earlier, the land use went through four iterations

before the final data sets were developed. The development of each iteration incorporated new or revised information to modify the prior land use plan iteration.

#### LAND USE ANALYSIS MODEL

The Land Use Analysis Model (LAM) is run with the input control totals, the existing land use and the future land use plan composed of the known layer and the plan layer. A brief overview of the LAM is presented in this document, an extensive discussion of the Model is provided in the previously cited MRCOG publication, TM-128. The input existing land use layer was updated with 2000 Census and 2000 Department of Labor data disaggregated by MRCOG. The model runs for the final 2025 MTP socioeconomic data sets included the proposed 2025 MTP transportation network in the scoring layers for the Model.

The Model is designed to allocate housing and employment growth. Control totals for housing by type and employment by sector are inputs. LAM calculates the amount of growth required to reach the respective control totals and allocates that amount of growth. The amount of growth could be a negative which would cause LAM to reduce the number of housing units or jobs in an area. As previously noted, Tribal lands and KAFB are excluded from the LAM allocation, therefore, the input control totals will be reduced by the amount of growth forecast for Tribal lands and KAFB. LAM will not allocate to Tribal or KAFB lands, but the existing socioeconomic data for those lands is counted by LAM in balancing to the input control total. Forecast growth for the Tribal lands and KAFB is added to the output from LAM.

To run LAM, the input ArcView shape files are converted to a cell structure using a 100-foot grid. Any grid size can be used to produce cells for use in LAM. The grid size of 100 feet was selected as a compromise between having a cell small enough to not lose detail in the land use coverage without burdening the computer system with excessive cells. At this grid size, each cell is approximately one-fourth of an acre. Each cell can have only one land use designation. There is a housing density and an employment density associated with the designated land use. The land use and density for the cell is taken from the data for the polygon at the center of the respective cell.

The increase in precision from having a relatively small grid size forced MRCOG to clip some areas from the LAM run. The MRCOG Region contains approximately 6.2 million acres. The one-fourth acre cell size would create too many cells for the MRCOG computer system to process. To reduce the number of cells, areas outside the Transportation Modeling Area were clipped. From a regional perspective, the DASZs selected to be clipped from the LAM run accounted for less than 3 percent of the Region's expected growth over the next 25 years. The clipped DASZs were forecast off-line from the model using trend techniques. The forecasts for the DASZs outside the Transportation Modeling Area were added to the DASZ data set after the LAM runs to produce a regional data set.

LAM is designed to run with two iterations. The first iteration of LAM uses subregional control totals which in this case were county control totals. In the first iteration, areas that were redeveloped (an area that has a given land use with either housing or employment is replaced with a different land use that also has either housing or employment) caused LAM to fall short of the control totals by the sum of the amounts of displaced housing and employment. The displaced housing and employment was allocated in a second iteration. The Model does not allow for sub-regional control totals in the second iteration, therefore, the outstanding growth to be allocated was distributed to the available cells across the entire region to match the overall control totals. In this case, the control totals were the forecast regional population minus the amount forecast outside the Transportation Modeling Area.

The allocation to cells is by use of a set of scoring layers. There is a scoring layer for each variable to be allocated. The scoring layer contains a calibrated equation that relate to a series of descriptive shape files. Each descriptive shape file geographically describes a variable in the scoring equation. The equation produces a layer with a set of scores for the cells. Each cell has a score generated by the appropriate equation. The variable to be allocated is apportioned according to the respective scores of the cells starting with the cell with the highest score. The cell scores could loosely be considered attractiveness scores for the cells. LAM allocates each variable; single family housing is allocated with the scoring layer for single family housing; multifamily housing is allocated with the scoring layer for multifamily housing and so forth.

Output from LAM consists of housing by type and employment by land use category for each Data Analysis Subzone (DASZ). MRCOG staff calculates the population forecast from the output housing forecast. The employment forecast is converted from land use categories to SIC categories by staff.

Socioeconomic Forecasts for Development of the 2025 Metropolitan Transportation Plan, TM-128 pages 57 through 67 discusses the generation of other variables required by the transportation model from the LAM output. The discussion provided in TM-128 will not be repeated here as the procedure, with two exceptions, is the same.

The two exceptions to the procedures in TM-128 relate to the generation of employed persons and vehicles available to households. Both of these variables are now generated within the updated MRCOG Transportation Model rather than being inputs. Documentation of the generation of these two variables is part of the documentation of the transportation model.

#### PART 3

#### FORECAST OF POPULATION TO COUNTIES

Forecasts by the Mid-Region Council of Governments (MRCOG) are typically based on county projections by the University of New Mexico Bureau of Business and Economic Research (BBER). The most recent projections provided to the MRCOG by BBER were produced in the summer of 2002. TABLE 5 summarizes the BBER projections to 2025 for the counties in State Planning and Development District 3.

TABLE 5
POPULATION PROJECTIONS BY COUNTY
State Planning and Development District 3
August 2002 BBER Forecast

Year*	Bernalillo Sandoval		Torrance	Valencia	Total
	County	County	County	County	SPDD3**
1990	480,577	63,319	10,285	45,235	599,416
1995	524,820	79,268	13,038	56,833	673,959
2000	556,678	89,908	16,911	66,152	729,649
2005	595,954	108,538	19,523	76,512	800,527
2010	631,839	126,294	21,690	86,708	866,531
2015	666,114	144,377	23,475	97,330	931,296
2020	698,832	162,409	24,979	108,064	994,284
2025	729,750	179,998	26,318	118,593	1,054,659

Source: U.S. Census and UNM-BBER.

The BBER projections do not go below the county level. MRCOG staff disaggregated these projections to smaller geographic areas. The first disaggregation involved Santa Fe County. Southern Santa Fe County is now part of the Transportation Modeling Area and the MRCOG Region.

To project southern Santa Fe County, MRCOG staff collected population data for Santa Fe County and southern Santa Fe County back to 1960 along with BBER projections for Santa Fe County to 2025. A review of the data showed that growth in southern Santa Fe County had begun after 1970 and that pre-1970 southern Santa Fe County population trends probably had little to do with the current situation. It was determined to disregard the data prior to 1970, inclusion of 1960 data would most likely skew the projection. In developing a trend projection, the underlying assumptions were that southern Santa Fe County would continue to be an attractive residential location for persons working in the MRCOG Region.

<sup>\*</sup> Data is for July of the indicated year except for 1990 and 2000 which is for April.

<sup>\*\*</sup> State Planning and Development District 3 which consists of the Counties of Bernalillo, Sandoval, Torrance, and Valencia.

The population history of southern Santa Fe County and Santa Fe County since 1960 is provided in TABLE 6. This Table displays the population in the southern part of the County that was estimated by MRCOG staff. Southern Santa Fe County that is included in the MRCOG Region is approximately the southern 12 miles of the county. The percentage of the population of the County in the southern part is calculated and reported in this table. The growth rates for both the entire County and the southern part are displayed along with the ratio of these rates.

TABLE 6
SANTA FE COUNTY AND SOUTHERN SANTA FE COUNTY
Population Statistics 1960 – 2000

Year	Santa Fe	Southern	S. Santa	Santa Fe	S. Santa	Ratio of
	County	Santa Fe	Fe County	County	Fe County	Growth
		County	Percentage	Growth*	Growth*	Rates
1960	44,970	263	0.58			
1970	54,774	296	0.54	1.992	1.189	0.5969
1980	75,519	1,185	1.57	3.264	14.880	4.5588
1990	98,928	3,700	3.74	2.737	12.059	4.4059
2000	129,292	9,065	7.01	2.713	9.375	3.4556

Source: U.S. Census

1970 to 2000 data was used to calculate three separate projections based on a least squares regression. The three projections were:

- Regression on the ratio of the growth rate of southern Santa Fe County to the growth rate of Santa Fe County since 1970, the R-square value was .852;
- Regression on the growth rates for southern Santa Fe County since 1970, the R-square value was .999; and
- Regression of southern Santa Fe County population growth since 1970, the R-square value was .891.

The arithmetic mean of the results of these three techniques became the projection for southern Santa Fe County to 2025. The use of the mean incorporated information from all three techniques while moderating the extremes of any one technique.

The southern Santa Fe County population projection to 2025 is presented in TABLE 7. This table also contains the BBER projection for Santa Fe County to 2025. Information on growth rates, the ratio of growth rates and the percentage of Santa Fe County population projected for southern Santa Fe County are also contained in the table.

The projection is for continued growth in southern Santa Fe County, but at progressively slower rates. The southern part of the County continues to grow at a rate that is faster than that of the entire County, but as the population in the southern portion increases the ratio of the two growth rates becomes increasingly closer. The proportion of Santa Fe County's population in the southern part grew from 3.7 percent to 7 percent

<sup>\*</sup>Average annual growth rates for the preceding decade (the entry in the 1970 line is for the decade 1960-1970.

in the ten years from 1990 to 2000. The population increase will slow considerably over the next 25 years as the portion in the southern part increases to 12.4 percent of the County's population. TABLE 8 displays the total MRCOG Region population which combines SPDD3 and southern Santa Fe County.

TABLE 7 SUMMARY OF POPULATION PROJECTION FOR SOUTHERN SANTA FE COUNTY, 2000 - 2025

Year	Santa Fe	Santa Fe	So. Santa	Ratio of	Projected	So. Santa
	County	County	Fe County	Growth	Southern	Fe County
	Population	Growth	Growth	Rates*	Santa Fe	Percentage
		Rate*	Rate*		County	of County
					Population	Population
2000	129,292	2.713	9.375	3.4556	9,065	7.01
2005	143,987	2.072	4.397	2.1226	11,363	7.89
2010	158,624	1.955	3.729	1.9074	13,771	8.68
2015	174,400	1.914	3.150	1.6452	16,206	9.29
2020	191,403	1.878	2.594	1.3811	18,538	9.69
2025	208,801	1.755	2.009	1.1446	20,579	9.86

Source: BBER and MRCOG.

TABLE 8 HISTORICAL AND PROJECTED SPDD3\* AND MRCOG REGION POPULATION 1960-2025\*\*

Year	SPDD3	MRCOG Region
1960	299,043	299,306
1970	359,007	359,303
1980	492,759	493,944
1990	599,416	603,116
2000	729,649	738,714
2005	800,527	811,890
2010	866,531	880,302
2015	931,296	947,502
2020	994,284	1,012,822
2025	1,054,659	1,075,238

Sources: U.S. Census, BBER, and MRCOG.

The average annual growth rates for each county or county portion are displayed in TABLE 9. The Region and each of the component counties are projected to continue

<sup>\*</sup>Average annual growth rates by decade.

<sup>\*</sup>State Planning and Development District 3 which consists of the Counties of Bernalillo, Sandoval, Torrance, and Valencia.

<sup>\*\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

to increase, however, the rate of increase will slow. By 2025, the Region will still be growing by more than one percent per year.

TABLE 9 HISTORICAL AND PROJECTED RATES OF GROWTH FOR SPDD3 AND MRCOG REGION POPULATION 1960-2025

Time	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
Period	County	County	County	County	Santa Fe	Region
1960-70	1.877	2.106	-2.034	2.392	1.189	1.844
1970-80	2.886	7.121	3.540	4.169	14.880	3.234
1980-90	1.364	6.169	3.221	3.929	12.059	2.017
1990-2000	1.481	3.568	5.098	3.874	9.375	2.049
2000-05	1.307	3.652	2.774	2.810	4.398	1.815
2005-10	1.176	3.077	2.127	2.534	3.919	1.631
2010-15	1.062	2.712	1.594	2.338	3.310	1.482
2015-20	0.964	2.382	1.250	2.114	2.725	1.342
2020-25	0.870	2.078	1.050	1.877	2.111	1.203

Sources: U.S. Census, BBER, and MRCOG.

#### PART 4

## HOUSEHOLDS, POPULATION IN HOUSEHOLDS, AND HOUSING FORECASTS TO COUNTIES

#### INTRODUCTION

Households, population in households, and housing by type were forecast for the mid-region of New Mexico by the MRCOG. The forecasts were developed from population projections and historical data relating to the forecast variables.

The forecast variables are herein defined to provide a better understanding of the data and the forecast methodology. A household is equivalent to an occupied housing unit. Total population has two components: population in households, also called household population; and population in group quarters. There is a wide variety of facilities classified as group quarters including: correctional facilities, nursing homes, mental institutions, college dormitories, military quarters, group homes, certain types of senior housing, monasteries, shelters, and other group living situations. Housing units, for purposes of this forecast, are divided into single family and multifamily units. Multifamily refers to units in buildings that contain multiple housing units not housing units that contain multiple families. Multifamily units are all units contained in structures that have two or more housing units. A structure is considered to have multiple units when there is not a wall from foundation to roof separating one housing unit from another unit. Single family housing units are defined as total housing units minus multifamily units.

#### POPULATION IN HOUSEHOLDS

Population in households was forecast as total population minus population in group quarters. TABLE 10 displays the historical percentage of population in group quarters for the MRCOG region. The percentage of the population in group quarters declined from 1960 to 1980, much of the reason was the decline in the number of military personnel both in actual numbers and as a percentage of the regional population. Since 1980, the percentage has increased by approximately the same percentage amount in each decade. The recent increase has been the result of two trends. First, the percentage of the population over 75 years of age has been increasing which increases the need for nursing facilities and senior housing. Second, there has been construction of new prison facilities, some of which are intended to house persons from outside this region.

Demographic forecasts by the University of New Mexico Bureau of Business and Economic Research (BBER) indicate that the percentage of elderly persons will continue to increase. New prison facilities are currently being constructed and it is entirely possible that there will be additional facilities constructed or remodeled in the future. It is reasonable to expect the number of persons in nursing homes, and senior housing to continue to increase at a rate faster than the increase in the overall population. Given the steady increase in the percentage of group quarters population over the past 20 years and

the conditions in place to continue this trend, the percentage of population in group quarters was projected by calculating a least squares trend line to 2025 based on the 1980 to 2000 data. TABLE 11 displays the forecast population, population in households (population minus group quarters), population in group quarters, and the percentage of population in group quarters.

TABLE 10
POPULATION, POPULATION IN GROUP QUARTERS AND GROUP QUARTERS
PERCENTAGE 1960 – 2000 for MRCOG REGION

Year	Population	Population in Group	Percentage in Group
		Quarters	Quarters
1960	299,306	6,434	2.150
1970	359,303	6,766	1.883
1980	493,944	6,148	1.245
1990	603,116	8,907	1.477
2000	738,714	13,217	1.789

Source: U.S. Bureau of Census

TABLE 11
POPULATION, POPULATION IN HOUSEHOLDS, POPULATION IN GROUP
QUARTERS AND GROUP QUARTERS PERCENTAGE
2000 - 2025 for MRCOG REGION\*

Year	Population	Population in	Population in	Percentage in
		Households	Group Quarters	Group Quarters
2000	738,714	725,507	13,217	1.789
2005	811,890	796,203	15,687	1.932
2010	880,302	862,094	18,208	2.068
2015	947,502	926,615	20,887	2.204
2020	1,012,822	989,118	23,704	2.340
2025	1,075,238	1,048,609	26,629	2.477

Sources: BBER and MRCOG.

Group quarters population was distributed to counties based on 2000 census data for the components of this population. Group quarters population was divided into six components based on type of population: correctional facilities, nursing homes, other institutional facilities, college dormitories, military quarters, and other non-institutional settings including shelters and homeless. A projection was made for each county for each component. The projections were made based on county-specific ratios computed from 2000 census data and applied to future year population forecasts. The ratios and methods of projection for each component are defined as:

• Population in correctional facilities was projected from the ratio of this population to the total population;

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

- Population in nursing homes was projected from the ratio of population age 75 and over to the total population;
- Population in other institutions was projected from the ratio of this population to the total population;
- Population in college dormitories was projected from the ratio of population age 18 to 24 to the total population;
- The amount of population in military quarters was held constant;
- Population in other non-institutional settings was projected from the ratio of this population to the total population.

The results of these calculations were balanced to the regional control totals shown in TABLE 11. Population in Households was forecast by subtracting the group quarters population in each county from the adjusted forecast of total population, TABLE 12.

TABLE 12
FORECAST POPULATION IN HOUSEHOLDS BY COUNTY\*

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
	County	County	County	County	Santa Fe	Region
2000	546,051	89,213	16,387	64,781	9,065	725,507
2005	583,455	107,396	18,960	75,029	11,363	796,203
2010	617,688	124,613	21,017	85,005	13,771	862,094
2015	650,051	142,244	22,734	95,380	16,206	926,615
2020	680,771	159,762	24,175	105,872	18,538	989,118
2025	709,567	176,811	25,469	116,183	20,579	1,048,609

Sources: U.S. Census, BBER, and MRCOG

#### **HOUSEHOLDS**

Households were forecast from population in households by projecting the average (mean) household size to 2025. TABLE 13 displays the recent history of average household size by county, for the region, and for the United States. The number of households in southern Santa Fe County was not compiled for years prior to 1990. The average household size for the mid-region of New Mexico for 1960 through 1980 was estimated without southern Santa Fe County. Given that the number of households in southern Santa Fe County was relatively small, probably less than 300 in 1980 and less than 100 in both 1960 and 1970, the exclusion of southern Santa Fe County does not affect the calculation of the regional average. It can be seen that household size has declined in each of the counties during each decade over the past 40 years. In recent years the decline has slowed. Still, the decline has continued in all counties as the percentage of households with children has declined and the number of single person households has increased.

Since 1980, the average household size for the MRCOG region has been very similar to the average for the United States. The decline in the regional average prior to 1980 had been considerably more rapid than the decline in the national average. After

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

the regional average had declined to the approximate level of the national average, the decline in the regional average slowed and since 1980 the rate of decline in the regional average has been only slightly more rapid than the national average. Given that the regional average has been similar to the national average over the past three census counts, it is reasonable to assume that the regional average will continue to be similar to the national average over the next 25 years. This assumption allows the projected rate of change for the national average to be applied to the MRCOG region average. The most recent Bureau of the Census projections for the national average household size to 2010 is displayed in TABLE 14. The projections contained three series, MRCOG used Series 1 since that series most nearly approximated the results of the 2000 census.

TABLE 13 AVERAGE HOUSEHOLD SIZE BY COUNTY

Year	United	MRCOG	Bernalillo	Sandoval	Torrance	Valencia	Southern
	States	Region	County	County	County	County	Santa Fe
1960	3.33	3.64	3.58	4.73	3.74	3.97	n/a
1970	3.14	3.34	3.29	4.19	3.25	3.60	n/a
1980	2.76	2.79	2.74	3.30	2.83	2.97	n/a
1990	2.63	2.62	2.55	3.02	2.80	2.89	3.23
2000	2.59	2.55	2.47	2.84	2.72	2.86	2.88

Source: U.S. Bureau of the Census

TABLE 14 PROJECTED UNITED STATES AVERAGE HOUSEHOLD SIZE

Year	Average Household	Year	Average Household
	Size		Size
1995	2.62	2003	2.58
1996	2.61	2004	2.57
1997	2.61	2005	2.57
1998	2.60	2006	2.56
1999	2.60	2007	2.55
2000	2.59	2008	2.55
2001	2.59	2009	2.54
2002	2.58	2010	2.53

Source: U.S. Bureau of the Census, "Projections of Households by Type: 1995 to 2010, Series 1, 2, 3", May 1996.

An analysis of the Bureau of Census projection of average household size shows that the projection is essentially linear, therefore, MRCOG extended the linear trend to 2025. The annual rate of decline in the projected national average was applied to the regional average. TABLE 15 displays the projected regional average household size. The projected averages were applied to the forecast population in households for the MRCOG region to generate a regional forecast of the number of households.

TABLE 15 MRCOG REGION PROJECTED AVERAGE HOUSEHOLD SIZE

Year	Average Household
	Size
2005	2.53
2010	2.49
2015	2.47
2020	2.44
2025	2.42

Source: U.S. Census and MRCOG

TABLE 13 also demonstrated that, since 1980, the rates of decline for average household size in each of the counties had been very similar to the rate of decline in the national average. The projected national rates of decline were applied to the average household size for each county beginning with 2000. The resulting projections of average household size for each county were applied to the county projections of population in households to produce an initial calculation of households for each county. The initial projections for the counties were balanced to the total households for the region calculated from the regional average household size. TABLE 16 reports the forecast households by county.

TABLE 16 FORECAST HOUSEHOLDS BY COUNTY\*

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
	County	County	County	County	Santa Fe	Region
2000	220,936	31,411	6,024	22,681	3,151	284,203
2005	238,861	38,239	7,049	26,528	3,989	314,666
2010	257,448	45,171	7,955	30,598	4,923	346,095
2015	274,175	52,178	8,708	34,743	5,862	375,666
2020	290,526	59,297	9,369	39,021	6,785	404,998
2025	306,356	66,392	9,986	43,322	7,620	433,676

Source: U.S. Census and MRCOG.

The average persons per household or average household size for the forecast was computed and displayed in TABLE 17. Bernalillo County has and is forecast to have the lowest average household size. The other counties have and are forecast to have average households sizes that are relatively similar.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

TABLE 17 FORECAST AVERAGE HOUSEHOLD SIZE BY COUNTY

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
	County	County	County	County	Santa Fe	Region
2000	2.47	2.84	2.72	2.86	2.88	2.553
2005	2.44	2.81	2.69	2.83	2.85	2.530
2010	2.40	2.76	2.64	2.78	2.80	2.491
2015	2.37	2.73	2.61	2.75	2.76	2.467
2020	2.34	2.69	2.58	2.71	2.73	2.442
2025	2.32	2.66	2.55	2.68	2.70	2.418

Sources: U.S. Census and MRCOG

#### HOUSING UNITS

Housing units were forecast from households based on the expected occupancy rate since the households are defined by the Census as occupied housing units. Data from the last three census reports have shown a relatively consistent occupancy rate ranging from 91 to 93 percent with an average of 91.94 percent. This average was used as the expected future occupancy rate for the region. Likewise an average occupancy rate was calculated for each county, these rates were used to generate an initial solution for housing units by county. The average occupancy rates by county from the last three census reports were: Bernalillo County = 92.66 percent; Sandoval County = 88.74 percent; Torrance County = 80.47 percent; Valencia County = 90.67 percent; and southern Santa Fe County (1990 and 2000 data) = 87.61 percent. The initial solution was balanced to the calculated total regional total housing units based on the regional average. TABLE 18 presents the housing units by county.

TABLE 18 FORECAST HOUSING UNITS BY COUNTY\*

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
	County	County	County	County	Santa Fe	Region
2000	239,074	34,866	7,257	24,643	3,457	309,297
2005	256,873	42,942	8,728	29,157	4,537	342,237
2010	276,678	50,694	9,844	33,608	5,596	376,420
2015	294,490	58,525	10,770	38,138	6,659	408,582
2020	311,905	66,478	11,582	42,815	7,704	440,484
2025	328,767	74,403	12,340	47,515	8,649	471,674

Sources: U.S. Census and MRCOG.

Housing units were disaggregated into single family and multifamily units. TABLE 19 presents the historical multifamily unit percentage for each county. The percentage of multifamily housing peaked in 1990. Since 1990, the percentage has dropped as less than 15 percent of the new housing in the past decade was multifamily.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

TABLE 19 MULTIFAMILY HOUSING UNITS AS A PERCENTAGE OF TOTAL UNITS BY COUNTY, 1970-2000

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	MRCOG
	County	County	County	County	Santa Fe	Region
1970	18.32	3.43	3.78	7.35	0	16.83
1980	24.38	7.97	6.95	8.03	0	22.01
1990	28.54	5.66	1.62	5.45	0.88	24.11
2000	27.22	7.08	1.52	4.56	0.35	22.24

Source: U.S. Bureau of the Census

The amount of new housing by type for each decade is displayed in TABLE 20. This is calculated as the net change in housing units from one census count to the next. Mobile homes and manufactured housing are included as single family units. The increase in manufactured housing in the past decade has probably contributed to the decline in the number of multifamily units.

TABLE 20 NET CHANGE IN TYPE OF HOUSING FROM CENSUS TO CENSUS, 1970 - 2000

Period	Single	Multifamily	Total	Single	Multifamily
	Family	Units	Housing	Family	Percentage
	Units		Units	Percentage	of Net
				of Net	Change
				Change	
1970-1980	54607	22806	77413	70.54	29.46
1980-1990	41023	18250	59273	69.21	30.79
1990-2000	52353	9020	61373	85.30	14.70

Source: U.S. Bureau of the Census

For twenty years, the percentage of net units added to the regional housing stock that were multifamily units averaged 30.12 percent. During this 20 year period, there were a number of cycles. The construction of multifamily housing tends to be cyclical. When there is a sufficient demand and other conditions such as financing are favorable, a number of multifamily units will be constructed. When conditions are not favorable, few multifamily units will be constructed. In the last decade, the multifamily cycle has tended to be down. So far in this decade, construction of multifamily housing continues to be down. MRCOG estimates that in the 2000 to 2005 period only 10 percent of the net increase in housing units will be multifamily units.

It is reasonable, however, to expect the percent for multifamily units to increase in the future. The aging population of the region argues for an increase in demand for multifamily units which may have benefits for a segment of the population that has a large share of one-person households. There is really no model for what the future demand may be for multifamily housing. For the purposes of this forecast, it was

assumed that by the 2020 to 2025 time period the net percentage of multifamily units would reach 30.12 percent (the average percentage for the 1970 to 1990 period. This is a reasonable expectation since that level of multifamily construction was maintained over a 20 year period. MRCOG forecast the 2000 to 2005 period to have a 10 percent net construction of multifamily units. The percentage would increase during each five-year time period until it reached 30.12 percent in the 2020 to 2025 period. TABLE 21 summarizes the forecast of multifamily units for the region to 2025. The result of this methodology is a multifamily housing percentage for the region in 2025 that is only slightly lower than the current percentage.

TABLE 21 HOUSING UNITS BY TYPE, 1970 -2025\*

#### MID-REGION of NEW MEXICO

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	92,515	18,723	16.83	111,238
1980	147,122	41,529	22.01	188,651
1990	188,145	59,779	24.11	247,924
2000	240,498	68,799	22.24	309,297
2005	270,504	71,733	20.96	342,237
2010	299,190	77,230	20.52	376,420
2015	324,899	83,683	20.48	408,582
2020	348,797	91,687	20.82	440,484
2025	370,593	101,081	21.43	471,674

Source: U.S. Bureau of the Census and MRCOG.

Housing type by county was projected from historical averages for multifamily housing. The 1980 to 2000 averages were used for Bernalillo and Sandoval Counties; TABLE 20 indicates some consistency for both of these counties for that twenty-year period. TABLE 20 also shows that Torrance and Valencia Counties were different in 1990 and 2000 from earlier years. The data for southern Santa Fe County prior to 1990 is estimated. To project Torrance, Valencia, and southern Santa Fe counties, the mean of the 1990 and 2000 data points were used. The projected averages for each county were used in combination with the regional control totals presented in TABLE 21 to generate the number of multifamily housing units by county. Single family units were computed as the total number of units minus the projected number of multifamily units. TABLES 22 through 26 present the county forecasts.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 22 HOUSING UNITS BY TYPE, 1970 -2025\*

### BERNALILLO COUNTY

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	80,462	18,043	18.32	98,505
1980	122,340	39,447	24.38	161,787
1990	143,802	57,433	28.54	201,235
2000	173,990	65,084	27.22	239,074
2005	189,300	67,573	26.31	256,873
2010	204,679	71,999	26.02	276,678
2015	216,883	77,607	26.35	294,490
2020	227,288	84,617	27.13	311,905
2025	235,894	92,873	28.25	328,767

Source: U.S. Bureau of the Census and MRCOG

TABLE 23 HOUSING UNITS BY TYPE, 1970 -2025\*

### SANDOVAL COUNTY

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	4,444	158	3.43	4602
1980	10,950	948	7.97	11,898
1990	22,327	1,340	5.66	23,667
2000	32,397	2,469	7.08	34,866
2005	40,022	2,920	6.80	42,942
2010	47,285	3,409	6.72	50,694
2015	54,540	3,985	6.81	58,525
2020	61,818	4,660	7.01	66,478
2025	68,971	5,432	7.30	74,403

Source: U.S. Bureau of the Census and MRCOG

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 24 HOUSING UNITS BY TYPE, 1970 -2025\*

#### TORRANCE COUNTY

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	1,835	72	3.78	1,907
1980	2,959	221	6.95	3,180
1990	4,799	79	1.62	4,878
2000	7,147	110	1.52	7,257
2005	8,593	135	1.55	8,728
2010	9,694	150	1.52	9,844
2015	10,603	167	1.55	10,770
2020	11,397	185	1.60	11,582
2025	12,136	204	1.65	12,340

Source: U.S. Bureau of the Census and MRCOG

TABLE 25 HOUSING UNITS BY TYPE, 1970 -2025\*

# VALENCIA COUNTY

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	5,669	450	7.35	6,119
1980	10,450	913	8.03	11,363
1990	15,866	915	5.45	16,781
2000	23,519	1,124	4.56	24,643
2005	28,080	1,077	3.69	29,157
2010	31,969	1,639	4.88	33,608
2015	36,254	1,884	4.94	38,138
2020	40,638	2,177	5.08	42,815
2025	44,999	2,516	5.30	47,515

Source: U.S. Bureau of the Census and MRCOG

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 26 HOUSING UNITS BY TYPE, 1970 -2025\*

# SOUTHERN SANTA FE COUNTY

Year	Single Family	Multifamily Units	Percent	Total Units
	Units		Multifamily	
1970	105	0	0.00	105
1980	423	0	0.00	423
1990	1,351	12	0.88	1,363
2000	3,445	12	0.35	3,457
2005	4,509	28	0.62	4,537
2010	5,563	33	0.59	5,596
2015	6,619	40	0.60	6,659
2020	7,656	48	0.62	7,704
2025	8,593	56	0.65	8,649

Source: U.S. Bureau of the Census and MRCOG.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

#### PART 5

#### EMPLOYMENT AND EMPLOYED RESIDENTS

#### INTRODUCTION

Employment forecasts based on recently available data have been developed for the mid-region of New Mexico by MRCOG. The Council of Governments forecasts relied on two sources. Short-term forecasts were primarily driven by the Metropolitan Statistical Area (MSA) economic forecasts from the BBER FOR-UNM model. The BBER forecasts (April 2002) are to the year 2006. Long-term forecasts were derived from the REMI Model. The current REMI Model is calibrated on local data from 1969 through 1999 and projects to the year 2035. The REMI model forecasts for the four counties of State Planning and Development District 3 (SPDD3) which are Bernalillo, Sandoval, Torrance, and Valencia Counties. The starting point for the employment forecast was the March 2000 estimate by MRCOG based on New Mexico Department of Labor wage and salary data, 2000 Census self-employment estimates, and REMI estimates of agricultural employment.

There are two measures of employment. One measure is an estimate of employment developed by counting jobs, this estimate locates the jobs at the place of work. The other measure is an estimate of employed persons or workers which counts workers at their place of residence. Both employment and workers will be forecast to 2025. Since there are a number of persons working multiple jobs, the number for employment will be higher than the number of workers. The U.S. Department of Labor Bureau of Labor Statistics (BLS) estimates that nationally between 5 and 6 percent of workers hold multiple jobs. The 2000 Census data for this region suggests that the percentage may be considerably higher. There is also an issue of commuting to work for workers living outside the region and workers living in the region commuting out for work. Given the multiple jobholder and the commuting issues, it is necessary to develop estimates and forecasts for both jobs and workers. The MRCOG Transportation Model is designed for input of both variables. Employment by zone will be forecast and workers for the region will be forecast. The transportation model will distribute the workers to zones and generate the worker trips to the zones containing forecast employment. Commuting into and out of the modeling area is also handled within the transportation model.

The forecast of Employment (Jobs) will be discussed first followed by a discussion of the forecast of employed residents. The employment (jobs) forecast will be based on an economic forecast. The forecast of employed residents will be based on a demographic forecast. The REMI model will be common to both forecasts. The same REMI model output will be the basis of the long range forecasts for both the forecast of employment and the forecast of employed residents. Therefore, these forecasts will be integrated to the extent that the difference between the two forecasts will be a reasonable expectation of the sum of the multiple jobholders and commuters.

#### **EMPLOYMENT**

For purposes of transportation modeling, employment was defined as the sum of the following types of employment:

- Civilian nonagricultural wage and salary jobs;
- Armed forces:
- Agricultural employment;
- Nonagricultural self-employment; and
- Unpaid workers in family businesses.

Current nonagricultural wage and salary jobs for the Albuquerque Metropolitan Statistical Area (MSA) which includes Bernalillo, Sandoval, and Valencia Counties are published by the New Mexico Department of Labor (NMDOL). The MRCOG also obtained the March 2000 EQUI-202 data from the NMDOL which reports the number of wage and salary jobs at each work site, this data is generated by reports from employers for purposes of Unemployment Insurance. MRCOG allocated the '202' data to Data Analysis Subzones (DASZ) to create an initial employment distribution. This employment distribution for the three-county MSA was consistent with the 2000 nonagricultural employment estimate. This allocation was supplemented with data from other sources to obtain an estimate of total employment.

An estimate of armed forces personnel was obtained from BBER. This included both active duty personnel and National Guard and Reserve personnel. MRCOG distributed the BBER estimate of military employment for the MSA to county and DASZ based on information from military sources.

Agricultural employment was based on Bureau of Economic Analysis (BEA) estimates available at the time. The BEA number was compared to the 2000 Census data for employment by industry. The BEA estimate was about 13 percent higher than the Census industry data for agricultural employment which was expected. The difference is likely that some people have agricultural jobs as well as other jobs, the Census asks the respondent to indicate their primary industry of occupation. The estimate of agricultural employment was distributed to counties by referring to BEA data. Agricultural employment was disaggregated to DASZs that contained agricultural activity.

Nonagricultural self-employment was estimated from Census data. At the time of this estimate, Census 2000 data was available for persons who reported that they were self-employed. 1990 Census Public Microdata Sample (PUMS) data was used to calculate the portion of the persons in 1990 who reported self-employment by agricultural and nonagricultural employment. The 1990 proportions for nonagricultural self-employment were applied to the 2000 data for self-employment to derive an estimate of nonagricultural self-employment. Nonagricultural self-employment was allocated to counties based on 2000 Census estimates of self-employment minus the estimate of agricultural self-employment by county. Nonagricultural self-employment was allocated to DASZs within counties by using information from the 1990 PUMS. Two distributions were developed from the 1990 PUMS: 1) a distribution by industry for self-employment

that was based in homes; and 2) a distribution of self-employment by industry that was not based in homes.

Unpaid workers in family businesses by county were also estimated from Census 2000 data. The 1990 PUMS data was used to estimate the portion of the family business workers who were not agricultural workers. The nonagricultural unpaid family workers were distributed in a manner similar to the distribution of nonagricultural self-employment.

TABLE 27 summarizes the results of the calculations described in the previous paragraphs. This table provides the baseline for the employment forecast to 2025. The calculations were done at the Standard Industrial Classification (SIC) industry level to allow forecasting by SIC. The data reported in this report to be used in the transportation model will be by three categories (Basic, Retail, and Service) that are aggregates of SIC categories with the exception of non-retail employment on Kirtland Air Force Base (KAFB) which is classified as basic employment. It is important to note that this table is based on work site. County estimates of agricultural, self-employment, and unpaid family workers were based on the residence of the workers, the MRCOG process assigned the workers to the counties of work. The MRCOG process in disaggregating the '202' data also moved some employment from one county to another based on contact with the employer concerning the actual worksite.

TABLE 27
CALCULATION OF EMPLOYMENT BY COUNTY FOR MARCH 2000

Category	Bernalillo	Sandoval	Torrance	Valencia	Southern	Category
					Santa Fe	Total
Nonagricultural						
Jobs	317,943	24,936	3,092	12,004	1,086	359,061
Armed Forces	6,937	310	0	0	0	7,247
Agricultural	1,229	363	440	370	103	2,505
Nonagricultural						
Self-employed	18,117	1,777	372	2,359	94	22,719
Nonagricultural						
Unpaid Workers	685	61	51	96	10	903
Total Employment	344,911	27,447	3,955	14,829	1,293	392,435

Sources: New Mexico Department of Labor, U.S. Bureau of the Census, U.S. Bureau of Economic Analysis, UNM-BBER and MRCOG.

Employment was forecast by combining the short-term BBER forecasts of civilian nonagricultural employment and armed forces with the long-term REMI forecasts. The BBER forecasts for the Albuquerque MSA are to 2006 and are the primary source of the forecasts to 2006 except for supplemental data for agricultural, self-employment, and unpaid workers from the REMI model. Forecasts for Torrance and southern Santa Fe County are also added to the BBER forecasts. TABLE 28 displays the recent BBER forecasts.

# TABLE 28 BBER NONAGRICULTURAL AND MILITARY EMPLOYMENT FORECAST 2001-2006 ALBUQUERQUE MSA

SECTOR/YEAR	2000	2001	2002	2003	2004	2005	2006
Construction &							
Mining	23,352	24,275	22,887	22,559	23,277	24,005	24,560
Manufacturing	28,060	28,258	27,953	28,753	29,255	29,745	29,947
TCU*	19,826	19,933	20,373	20,729	21,172	21,526	21,999
Wholesale	16,601	16,225	15,896	16,027	16,284	16,410	16,498
Retail	66,355	67,383	68,276	69,626	71,089	72,380	73,578
FIRE**	18,901	19,467	19,682	20,342	20,966	21,427	21,887
Services	113,950	114,867	116,635	120,284	124,419	127,889	131,402
Government	67,838	68,775	69,950	71,387	72,320	73,719	75,053
Total							
Nonagricultural							
Employment	354,883	359,183	361,652	369,707	378,782	387,101	394,924
Military	7,247	7,041	7,036	7,034	7,032	7,036	7,054
TOTAL NonAg							
& Military							
Employment	362,130	366,224	368,688	376,741	385,814	394,137	401,978

Source: University of New Mexico, Bureau of Business and Economic Research, April 2002.

Employment was forecast in two segments, a short-range employment forecast to 2006 and a long-range employment forecast from 2006 to 2025. The short-range forecast is primarily based on the BBER forecast displayed in TABLE 28. The long-range forecast relies on the REMI model. The following two sections describe the methodology for deriving the two segments of the employment forecast.

The REMI model was critical to the long-range forecast, it was also used for part of the short-range forecast. Before using the REMI model, the standard REMI forecast for SPDD3 was adjusted to produce a population forecast that approximated the BBER population forecast to 2025. The migration variables in the REMI model were adjusted to produce a population almost exactly matched to the BBER population forecast. In addition, the variables were adjusted to as nearly as reasonably possible to match the age-cohort distribution of the BBER forecast. An exact match for cohorts was not possible with the variables that could be adjusted, however, the output was close to the BBER data for broad cohorts such as under age 16, age 16 to 64, and 65 and over. The adjusted REMI age cohort distribution was also similar to the BBER distribution in terms of how the 5-year age cohorts were arranged in order of size.

### <u>Short-range Employment Forecast, 2000 – 2006:</u>

The BBER forecast displayed in TABLE 28 is for civilian nonagricultural wage and salary employment and military enlistment for the Albuquerque MSA. Agricultural, nonagricultural self-employment and nonagricultural unpaid family workers were added

<sup>\*</sup> TCU is Transportation, Communications, and Utilities.

<sup>\*\*</sup> FIRE is Finance, Insurance, and Real Estate.

to complete the MSA Employment forecast. The forecasts for Torrance and Southern Santa Fe Counties also were added to complete the forecast for the region.

To add agricultural employment, the REMI model was used to compute the percentage of change in agricultural employment for each year. The percent change was applied to the 2000 estimate of employment in the agricultural sector to project agricultural employment to 2006. Nonagricultural self-employment and family workers were added by assuming that these components were included in the 2000 MRCOG estimates and that the sector-specific percentage increases in the BBER nonagricultural employment forecast should be reasonably the same as the non-government sector-specific increases for total employment. This assumption was justified since the 2000 estimate of civilian nonagricultural employment was 92 percent of the MRCOG 2000 estimated total civilian employment (MRCOG definition of total employment) within the MSA. TABLE 29 presents the total employment for the MSA after the additions for agricultural, self-employment, and unpaid family workers were completed.

TABLE 29 ALBUQUERQUE MSA TOTAL EMPLOYMENT 2001 – 2006

SECTOR/YEAR	2000	2001	2002	2003	2004	2005	2006
Agriculture	3,706	3,633	3,560	3,489	3,415	3,343	3,269
Construction &							
Mining	25,322	26,323	24,818	24,462	25,241	26,030	26,632
Manufacturing	29,561	29,770	29,449	30,292	30,821	31,337	31,550
TCU*	21,901	22,019	22,505	22,898	23,387	23,778	24,300
Wholesale	17,317	16,925	16,582	16,719	16,987	17,118	17,210
Retail	70,357	71,447	72,394	73,825	75,376	76,745	78,015
FIRE**	23,735	24,446	24,716	25,545	26,329	26,908	27,486
Services	119,641	120,604	122,460	126,291	130,633	134,276	137,964
Government	68,564	69,511	70,699	72,151	73,094	74,508	75,856
Military	7,247	7,041	7,036	7,034	7,032	7,036	7,054
TOTAL							
Employment	387,351	391,719	394,219	402,706	412,315	421,079	429,336

Sources: UNM-BBER, New Mexico Department of Labor, REMI, and MRCOG

A Torrance County forecast was generated from the MSA forecast. There was an expectation that in recent years the economy of Torrance County had been linked to the economy of the Albuquerque MSA. It would be expected that if retail employment, for example, had expanded in the MSA in a given year, it should also have expanded in Torrance County. It was found that in 51 of 80 cases, the annual sector-specific direction of the change in Torrance County was the same as the change in the MSA. In addition, the change in the total nonagricultural employment was in the same direction as the MSA in 9 out of 10 years. Further, the correlation (r) between the year-specific amount of change in Torrance County and the amount of employment change in the MSA was .9. From 1990 through 2000, the ratio for nonagricultural employment in Torrance County to

<sup>\*</sup> TCU is Transportation, Communications, and Utilities.

<sup>\*\*</sup> FIRE is Finance, Insurance, and Real Estate.

MSA nonagricultural employment rose almost steadily from 0.0067 in 1990 to 0.009 in 2000.

Torrance County and Albuquerque MSA nonagricultural Table B data was collected from NMDOL by sector for each year from 1990 through 2000. A year and sector-specific ratio of Torrance County employment to Albuquerque MSA employment was calculated by dividing the respective sector and year data for Torrance County by the Albuquerque MSA data. A least squares regression was performed for each sector where there was a directional change in the ratio of Torrance County employment to Albuquerque MSA employment. The computed coefficient from the regression analysis was used to project ratios for those sectors to 2006 (wholesale trade, services, and government). An arithmetic mean was calculated for the other sectors which did not have a directional change in the annual ratios. The ratio for total nonagricultural employment was also projected by regression to 2006 since there was a directional change in this ratio with an R-square value of .94. An initial amount of employment for each sector and the county total was computed by multiplying the projected ratios by the BBER MSA forecast data. The sector projections were summed and compared to the County total generated by the projected ratios for total nonagricultural employment. An average of the sum of the sectors and the projected County total was calculated to produce a control total for nonagricultural employment (the greatest difference between these two numbers was 56). The initial projections of nonagricultural employment by sectors were adjusted to the computed control total. Agricultural employment was added by use of the REMI model applying the percentage change to the 2000 MRCOG estimate of agricultural employment. The change in industrial sectors was applied to the MRCOG 2000 estimates so that nonagricultural self-employment and family workers were included in the projections. The Torrance County projections to 2006 were added to the MSA projections to create a 4-county SPDD3 forecast of employment to 2006. TABLE 30 summarizes the sector data for SPDD3.

Southern Santa Fe County was forecast by a different technique since there was not historical data for a portion of Santa Fe County. MRCOG first collected data for southern Santa Fe in 1995 and currently has two data points, 1995 and 2000. The growth between 1995 and 2000 was so great that any trend based on only these two points would very likely be excessively high. Therefore, REMI data was used along with an assumption that southern Santa Fe would have some future similarity to Torrance County. The 2000 employment estimate for southern Santa Fe County was aggregated into the three MRCOG transportation model categories for employment: Basic (which consists of agriculture; mining; construction; manufacturing; transportation, communications and utilities; wholesale, and military); Retail; and Service (which consists of finance, insurance, real estate, services, and government).

The annual rate of change for basic employment for SPDD3 calculated from output from the REMI model was used to project the change for basic employment in southern Santa Fe County. The use of REMI allowed the projection of Basic employment to 2025 rather than only to 2006. An assumption was made that the 2000 ratios between the aggregate Basic employment total and the component sectors would

remain constant except for agriculture. Nonagricultural sectors in the Basic category were projected to 2025 using the constant ratios. Agriculture was projected using the REMI forecast annual changes to predict the changes in southern Santa Fe County. The assumption was that agriculture in southern Santa Fe would have trends similar to agriculture in SPDD3.

TABLE 30 STATE PLANNING AND DEVELOPMENT DISTRICT 3 TOTAL EMPLOYMENT 2001 – 2006\*

SECTOR/YEAR	2000	2001	2002	2003	2004	2005	2006
Agriculture	4,049	3,975	3,901	3,829	3,755	3,682	3,607
Construction &							
Mining	25,563	26,633	25,054	24,696	25,481	26,276	26,882
Manufacturing	29,705	29,914	29,601	30,450	30,981	31,499	31,712
TCU**	22,325	22,493	22,949	23,350	23,849	24,246	24,776
Wholesale	17,432	17,015	16,680	16,825	17,100	17,238	17,337
Retail	71,110	72,238	73,197	74,639	76,201	77,580	78,860
FIRE***	23,777	24,489	24,759	25,589	26,374	26,954	27,533
Services	120,227	121,311	123,162	127,058	131,473	135,186	138,946
Government	69,707	70,672	72,003	73,525	74,531	76,017	77,436
Military	7,247	7,041	7,036	7,034	7,032	7,036	7,054
TOTAL							
Employment	391,142	395,781	398,342	406,995	416,777	425,714	434,143

Sources: UNM-BBER, New Mexico Department of Labor, REMI, and MRCOG.

Retail and Service categories of employment can generally be considered as population-serving employment, especially in southern Santa Fe and Torrance Counties. In 2000 the ratio of population to population-serving employment in southern Santa Fe was .0707 while the ratio in Torrance County was .1339. To calculate the ratio for Torrance County, the employment of the private correctional facility was subtracted from the service employment so this employment did not skew the ratio. Given that a retail and service center is expanding in the Edgewood area, an assumption also was made that by 2025 population-serving employment in southern Santa Fe County should be at a ratio at least equal to the 2000 ratio for Torrance County. Assumptions were developed regarding the four components of population-serving employment (retail; finance, real estate, and insurance; services; and government). The following ratios were held constant: population-serving employment to retail employment; population-serving employment to the FIRE (finance, real estate, and insurance) sector; and government employment to population. The services sector was allowed to vary.

The projections for southern Santa Fe County through 2006 were combined with the SPDD3 forecasts to produce a short-range forecast through 2006 for the region. The projections for southern Santa Fe County were included in the long-range forecasts to be discussed in the following section. It is noted that less than one percent of the total

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*\*</sup> TCU is Transportation, Communications, and Utilities.

<sup>\*\*\*</sup> FIRE is Finance, Insurance, and Real Estate

regional employment is located in southern Santa Fe County. TABLE 31 presents the total employment by sector for the region with the annual growth rate.

TABLE 31 FORECAST EMPLOYMENT 2000 – 2006\* MRCOG REGION

SECTOR/YEAR	2000	2001	2002	2003	2004	2005	2006
Agriculture	4,188	4,115	4,042	3,971	3,898	3,825	3,749
Construction &							
Mining	25,819	26,890	25,312	24,955	25,741	26,538	27,143
Manufacturing	29,720	29,929	29,616	30,465	30,996	31,514	31,727
TCU**	22,484	22,653	23,110	23,512	24,012	24,409	24,938
Wholesale	17,515	17,099	16,765	16,911	17,187	17,325	17,424
Retail	71,399	72,554	73,540	75,009	76,598	78,007	79,373
FIRE***	23,811	24,528	24,803	25,638	26,429	27,013	27,609
Services	120,352	121,455	123,325	127,240	131,673	135,405	139,225
Government	69,900	70,875	72,216	73,748	74,764	76,259	77,704
Military	7,247	7,041	7,036	7,034	7,032	7,036	7,054
TOTAL							
Employment	392,435	397,139	399,765	408,483	418,330	427,331	435,946
Growth Rate		1.20	0.66	2.18	2.41	2.15	2.02

Sources: UNM-BBER, New Mexico Department of Labor, REMI, and MRCOG.

TABLE 32 displays the percentage distribution by industrial sector. These percentages convey the change in proportional share for each sector over time. As would be expected, the proportional shares are very similar to the proportions for the nonagricultural employment forecast by BBER, the only changes being due to the addition of agricultural employment and the addition of Torrance and southern Santa Fe Counties. Retail, FIRE, services, and government are projected to gain in their respective portion of the distribution over the seven-year period from 2000 to 2006. However, 2001 is not actually a forecast year as there is nonagricultural data available for 2001, both retail and government declined in proportionate share from 2001 to 2006. This is consistent with the BBER forecast where only FIRE and services gained in proportional share from 2000 to 2006. The slight increases in proportional share for retail and government from 2000 to 2006 are due to the addition of Torrance and southern Santa Fe Counties. Retail and government employment (schools) account for large segments of both the Torrance and southern Santa Fe economies. The other industrial sectors ended the forecast period with various declines in proportionate share. Construction and TCU both had increases during the 2000 to 2006 period before declining. In the case of construction, the increase was due to actual 2001 data.

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*\*</sup> TCU is Transportation, Communications, and Utilities.

<sup>\*\*\*</sup> FIRE is Finance, Insurance, and Real Estate

TABLE 32 FORECAST EMPLOYMENT PERCENTAGE DISTRIBUTION 2000 – 2006 MRCOG REGION

SECTOR/YEAR	2000	2001	2002	2003	2004	2005	2006
Agriculture	1.07	1.04	1.01	0.97	0.93	0.90	0.86
Construction &							
Mining	6.58	6.77	6.33	6.11	6.15	6.21	6.23
Manufacturing	7.57	7.54	7.41	7.46	7.41	7.37	7.28
TCU*	5.73	5.70	5.78	5.76	5.74	5.71	5.72
Wholesale	4.46	4.31	4.19	4.14	4.11	4.05	4.00
Retail	18.19	18.27	18.40	18.36	18.31	18.25	18.21
FIRE**	6.07	6.18	6.20	6.28	6.32	6.32	6.33
Services	30.67	30.58	30.85	31.15	31.48	31.69	31.94
Government	17.81	17.85	18.06	18.05	17.87	17.85	17.82
Military	1.85	1.77	1.76	1.72	1.68	1.65	1.62
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Sources: UNM-BBER, New Mexico Department of Labor, REMI, and MRCOG.

### Long-range Employment Forecast, 2006 – 2025:

The REMI model, updated May 6, 2002, was used to project employment from 2006 through 2025. REMI forecasts are based on BEA and BLS data. The most recent complete BEA and BLS data at the time of the last update to the REMI model was for 1999. The BEA employment estimates count all jobs that generate income including agricultural employment, self-employment, and military enlistment. Among various employment estimates, those of BEA are consistently the highest as numerous workers are engaged in more than one activity which produces income. Some of the jobs counted by BEA are not included in the MRCOG definition of employment. The jobs counted by BEA but not included in the MRCOG estimate are: 1) Second self-employment jobs for persons with multiple self-employment jobs, the MRCOG definition counts a selfemployed person as a single job whereas BEA could count multiple jobs if the self employed person were engaged in multiple activities; and 2) Persons who are primarily wage-earners but have a self-employment business on the side and do not classify themselves on the Census questionnaire as self-employed would not be counted for selfemployment. The question of counting multiple self-employment jobs should not be a concern as a job for self-employment is being entered into the transportation model, the perspective of the MRCOG is that self-employment is regarded as a full-time job whether it involves one or several specific activities. The question of wage-earners who have a business on the side is a more serious question. At this time, the MRCOG is not counting these secondary jobs for purposes of the transportation modeling data set. Many of these secondary jobs may be occurring in conjunction with the worker's regular job such as an employee selling a product to their coworkers on a lunch break. In addition, many of these secondary jobs may be seasonal or occasional jobs which are performed at irregular

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<sup>\*\*</sup> FIRE is Finance, Insurance, and Real Estate.

times as opportunities arise therefore the impact of these jobs may be minimal on the transportation system. Some of these secondary self-employment jobs may really be hobbies that happen to produce income from time to time. Until there is evidence to the contrary, MRCOG believes that the inclusion of these jobs would unrealistically inflate the estimate of employment.

Despite the differing definitions, BEA and Department of Labor data are related. One of the major sources of BEA data is Department of Labor data generated by the States. The strong relationship is illustrated by comparing employment estimates for SPDD3 prepared over an 18-year period (1982-1999). New Mexico Department of Labor nonagricultural employment estimates for SPDD3 were compared to the BEA employment estimates, the NMDOL nonagricultural estimates accounted for a mean 76.31 percent of the BEA employment estimates with a standard deviation of only 1.35 percent.

Given this understanding of REMI forecasts generated from BEA and BLS data and BBER forecasts based on NMDOL data, it is possible to use the REMI generated data to complete the employment forecast to 2025. Three methods were developed to generate the forecast to 2025. The results of the three methods were considered for compatibility with the BBER employment forecast to 2006 and the BBER population forecast to 2025.

Method 1 used the sector-specific rate of change in each of the 10 employment sectors from the REMI model applied to the 2006 SPDD3 forecast. Rate of change, where one equaled no change, was calculated from the REMI forecast for the period 2006 to 2010. This factor was applied to the 2006 forecast to generate a 2010 projection for each sector. Likewise, 2015, 2020, and 2025 were projected. In addition, a factor was calculated for total employment. The projections of the specific sectors were adjusted to balance to the total. Since the REMI model is for SPDD3, the projections were limited to SPDD3. The previously forecast southern Santa Fe County data was added to the projections for SPDD3 to achieve a regional projection. TABLE 33 reports the Method 1 regional projection that resulted from the application of the factors after balancing and the addition of southern Santa Fe County. This method is as near as possible a direct conversion of the REMI forecast to the MRCOG projection based on the BBER FOR-UNM forecast.

It is noted that some sectors in the Method 1 projection have an actual numerical decline. These declines have to do with the interaction of variables within the REMI model. The most obvious decline is in manufacturing. The model projects that the value of manufactured goods in this region will increase but the model also projects that the productivity of employees in the manufacturing sector will also increase. From a dollar (1992 dollars) value standpoint, manufacturing shows a considerable gain from 2006 to 2025 but due to projected efficiencies, the number of manufacturing jobs declines. To a lesser extent, a similar situation also occurs with the wholesale and construction sectors, both of these sectors show a decline over the 2006 to 2025 period. In short, the model is projecting that productivity of the labor force will increase faster in these three sectors

than will the demand consequently a larger demand will be met by fewer employees. Agriculture declines in the model for several reasons, but the decline in agriculture is also reasonable from a land use perspective; agricultural land will be lost to urban development as the population of the region grows to a million persons. The advantage of this method is that it fully incorporates the economic data output from the REMI model.

TABLE 33
METHOD 1: PROJECTED EMPLOYMENT TO 2025

SECTOR/YEAR	2006	2010	2015	2020	2025
Agriculture	3,749	3,526	3,369	3,220	3,078
Construction & Mining	27,143	26,008	24,961	24,575	24,515
Manufacturing	31,727	30,500	30,195	30,169	29,903
TCU*	24,938	25,441	25,711	25,830	25,745
Wholesale	17,424	16,968	16,771	16,453	15,891
Retail	79,373	81,080	82,387	83,750	85,073
FIRE**	27,609	28,354	28,954	29,375	29,685
Services	139,225	149,667	161,138	172,733	183,977
Government	77,704	83,021	87,999	91,722	95,093
Military	7,054	7,436	7,636	7,785	7,939
TOTAL Employment	435,946	452,001	469,121	485,612	500,899
Annual Growth Rate		0.908	0.746	0.693	0.622

Source: MRCOG

A comparison of the growth rates resulting from the REMI projection with the BBER generated growth rates for the period up to 2006 shows a considerable slowing in the average annual rate of growth. In general, the REMI model produces a conservative forecast. At least part of the reason for the conservative forecast is the tie between the value of output and the amount of employment discussed in the previous paragraph.

Method 2 uses the year to year change in the growth rates from the REMI model applied to the SPDD3 forecast to 2006 that was based on the BBER MSA forecast. The BBER model in this case is generating a forecast that expects a higher annual rate of growth. However, the shape of the curve of the REMI forecast may be a reasonable projection of the ups and downs in the growth cycle. Therefore, the shape of the REMI forecast curve was applied to the BBER forecast beginning in 2006. The annual variations forecast by the REMI model were applied to the BBER forecast rate of growth beginning with the final year of the BBER forecast (2006). This method assumes that the variation in the growth rate projected by REMI is reasonable and that the shape of the curve for that variation is reasonable. However, Method 2 assumes that the curve for rate of growth from 2006 to 2025 should originate from the 2006 BBER forecast point rather than the 2006 REMI forecast point. This method continues the BBER trend defined by the annual rate of employment growth by applying the REMI year to year change to the annual rate of growth at the end of the BBER forecast period in 2006. Therefore, the shape of the curve for the REMI forecast is preserved as well as the interactions between the employment sectors that are central to the REMI model. Clearly, by applying the

<sup>\*</sup> TCU is Transportation, Communications, and Utilities.

<sup>\*\*</sup> FIRE is Finance, Insurance, and Real Estate.

REMI year to year changes to the BBER trend, that ended in 2006, a forecast will be generated that has a higher rate of growth. This technique projected only the total employment for SPDD3. Employment for southern Santa Fe County was added to generate a regional forecast. TABLE 34 presents the results of Method 2 for total employment. The advantage of this method is that it continues the BBER forecast trend for employment.

TABLE 34
METHOD 2: PROJECTED EMPLOYMENT TO 2025

Year	Projection based on BBER Forecast	Method 2 Projection	Average Annual Growth Rate
			Growth Rate
2000	392,435		
2005	427,331		1.718
2010		466,969	1.790
2015		512,931	1.895
2020		559,590	1.757
2025		604,935	1.571

Source: MRCOG

A third method relied on the interaction of the economic and demographic equations within the REMI model. The REMI model projects both population and employment. Within the demographic portion of the REMI model is a component for projecting labor force. The second section in this PART deals with the forecast of labor force and employed residents (workers) which is derived from the BBER population forecast. Clearly there is a relationship between employment (jobs) and employed residents (workers), however, this is not a one-to-one relationship. Workers can hold multiple jobs and workers can commute in or out of the Region. Based on the forecast of employed residents, a reasonable range of the likely number of jobs implied by the number of employed residents can be generated. The methodology for generating this range is discussed below along with the data in TABLE 44. At this point the results of that analysis are used to produce forecast Method 3 which is displayed in TABLE 35. The advantage of this method is that it ties the forecast population with the employment.

TABLE 35
METHOD 3: PROJECTED EMPLOYMENT TO 2025

Year	Low Estimate	High Estimate	Midpoint	Average Annual Growth
				Rate for Midpoint
2000	361,598	374,818	368,208	
2005	425,700	441,291	433,496	3.319
2010	471,270	488,547	479,909	2.055
2015	496,642	514,857	505,750	1.054
2020	517,261	536,239	526,750	0.817
2025	538,875	558,652	548,764	0.822

Source: MRCOG.

The midpoint of the probable range of employment implied by the forecast of employed residents was the Method 3 projection of employment. The high rate of increase from 2000 to 2005 is discussed in the section on Employed Residents. Briefly, the explanation is that the 2000 range is based on the 2000 Census. It is noted that the 2000 employment was higher than the high estimate for 2000. As explained later, MRCOG is treating the employed resident data from the 2000 Census as an anomaly until there is additional data collected. The trends used to project the high and low estimates in TABLE 35 are supported by both historical data and data currently being collected by the Department of Labor. The 2005 data is projected from historical and current data while the 2000 labor force data is from the Census and was lower than expected.

Forecast total employment was generated by combining the three methods and computing an arithmetic average. This procedure allowed for the combining of the advantages of each method. It also produced a result that was generally within the high and low ranges displayed in TABLE 35 so that a forecast was produced that was consistent with the population forecast. TABLE 36 summarizes the results of the three methods and provides the forecast for employment.

TABLE 36 SUMMARY OF METHODS AND CALCULATION OF TOTAL EMPLOYMENT

Year	Method 1	Method 2	Method 3	Forecast	Average
				Total	Annual
				Employment	Growth
					Rate
2000				392,435	
2005				427,331	1.718
2010	452,001	466,969	479,909	466,293	1.760
2015	469,121	512,931	505,750	495,934	1.240
2020	485,612	559,590	526,750	523,984	1.106
2025	500,899	604,935	548,764	551,533	1.030

Sources: MRCOG

The somewhat lower long-term growth rates generated from this forecast methodology are reasonable and are consistent with lower population growth rates forecast by BBER. The lower employment growth rates beyond 2010 are also consistent with the demographics of the BBER forecast discussed in PART 3 as well as the discussion in the section on Employed Residents. In recent decades, employment has grown at a more rapid rate than has population as the labor force participation rate has risen. This forecast, when compared with the population forecast, suggests that by 2025 the employment growth rate will be slower than the population growth rate. This would seem to be a reasonable result of an aging population.

The population forecast is for a change in the demographic structure of the population so that in the future there is expected to be a much larger percentage of persons in the older cohorts. In 1990, the median age for the residents of the region was

32. By 2000, the median age for the regional population had increased to 35. By 2025, the median age for this region is expected to be 40. These demographic changes are consistent with a slower employment growth rate, however, the rate of growth in Method 1 is clearly too slow for the growth in the labor force suggested by the population forecast. Likewise, Method 2 projects a far to rapid rate of increase, the demographics of the forecast population could not support the amount of growth projected by Method 2. Method 3 and the combination of the three methods brings together the employment and population forecasts.

Forecast of employment by sector was based on the Method 1 projection which takes full advantage of the REMI model. The assumption is that the growth by sector developed in Method 1 can be applied to the computed total employment. Employment by sector is displayed in TABLE 37.

TABLE 37
FORECAST EMPLOYMENT TO 2025\*

SECTOR/YEAR	2000	2005	2010	2015	2020	2025
Agriculture	4,188	3,825	3,637	3,562	3,474	3,389
Construction & Mining	25,819	26,538	26,830	26,388	26,517	26,993
Manufacturing	29,720	31,514	31,464	31,921	32,553	32,926
TCU**	22,484	24,409	26,245	27,181	27,871	28,347
Wholesale	17,515	17,325	17,505	17,730	17,753	17,497
Retail	71,399	78,007	83,644	87,096	90,368	93,673
FIRE***	23,811	27,013	29,251	30,609	31,696	32,686
Services	120,352	135,405	154,400	170,346	186,382	202,574
Government	69,900	76,259	85,646	93,029	98,970	104,706
Military	7,247	7,036	7,671	8,072	8,400	8,742
TOTAL Employment	392,435	427,331	466,293	495,934	523,984	551,533
Annual Growth Rate		1.718	1.760	1.240	1.106	1.030

Source: MRCOG

#### **Employment Forecast for Counties:**

County forecasts by employment sectors were computed following the calculation of the forecast regional total. For 2000 through 2006, Torrance and southern Santa Fe Counties had been computed separately from the MSA counties, therefore, the disaggregation was limited to the three MSA counties. For 2006 to 2025, the four counties of SPDD3 were disaggregated as southern Santa Fe County had been computed separately.

Bernalillo County, as the largest county was disaggregated first. Two methods were use to compute a Bernalillo County total. Method 1 was a share technique based on industrial sector growth forecast by the REMI model. Bernalillo County is forecast by the REMI model as a subarea of SPDD3. Method 2 was based on the long term trend for the proportionate share of the regional employment located in Bernalillo County. An

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

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<sup>\*\*\*</sup> FIRE is Finance, Insurance, and Real Estate

arithmetic mean of the totals produced by the two methods was used to forecast the total employment for Bernalillo County. The forecast for industrial sectors for Bernalillo County was computed from the data generated from Method 1 but the proportionate share of the sectors were balanced to the respective annual totals computed from the average of the two methods.

Method 1 for forecasting Bernalillo County used REMI model output of sector-specific data for Bernalillo County and SPDD3. The proportion of each sector in Bernalillo County was computed for each forecast year from the REMI output. A factor was computed for the change in each sector from one reporting year to the following reporting year. This factor represented the percentage change in the sector proportion from one reporting year to the subsequent reporting year. The computed factors were applied to the 2000 Bernalillo County sector-specific proportions to compute proportions for 2005, 2010 and so forth. The computed sector-specific proportions were applied to the previously forecast SPDD3 sector totals. The county total was the sum of the forecast sectors. This was a share forecast technique that was based on the contention that the REMI forecast change in proportionate share (Bernalillo County as a proportion of SPDD3) for each sector could be transferred to the previously computed SPDD3 forecast.

Method 2 for forecasting Bernalillo County was based on a trend analysis. TABLE 38 displays the estimated percentage of total employment in each county since 1980. Valencia County data is approximated from 1982 data since that was the first full year of data for the current geographic extent of Valencia County.

TABLE 38 PERCENTAGE OF EMPLOYMENT BY COUNTY, 1980 - 2000

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	Total*
	County	County	County	County	Santa Fe	
1980	93.9	2.3	0.5	3.2	**	100
1990	92.3	3.8	0.7	3.1	0.1	100
1995	89.1	6.3	0.8	3.7	0.1	100
2000	87.9	7.0	1.0	3.8	0.3	100

Sources: NMDOL and MRCOG

The Bernalillo County percentage has declined over the last 20 years. The decline was especially steep in the first half of the 1990's. A least-squares regression analysis using a natural log e transformation was performed to estimate a future trend for the Bernalillo County percentage to 2025. The log transformation was used to generate a trend line with a curve that replicated the observed curve in the historical data in that the decline in the Bernalillo County proportion was less in the more recent years. Projecting a curve is reasonable in that the decline in the Bernalillo County percentage should slow as the percentage gets closer to the share of new growth that Bernalillo County is attracting. In the decade of the 1980's, Bernalillo County attracted an estimated 87

<sup>\*</sup>Due to rounding, the columns may not sum to exactly 100 percent.

<sup>\*\*</sup>Less than one-tenth of one percent.

percent of the region's employment growth. During the first half of the 1990's, Bernalillo County attracted only an estimated 68 percent of the region's growth (much of the change was due to several major projects located in Sandoval County). In the last half of the 1990's, Bernalillo County attracted an estimated 80 percent of the region's growth. For a variety of reasons, the recent measurement of 80 percent of the growth appears to be nearer the likely long term percentage. Projecting the Bernalillo County percentage of employment with a curvilinear trend resulted in a decline in the Bernalillo County percentage to 81.7 percent by 2025. TABLE 39 displays the projected Bernalillo County totals for both Method 1 and Method 2 along with the arithmetic mean which was used as the Bernalillo County forecast. In the REMI forecast which is the basis for Method 1, Bernalillo County approximately maintains its current proportion of the regional employment total. By combining the two methods, there is a forecast for Bernalillo County which continues the historical trend but at a slightly slower rate. In the forecast, Bernalillo County attracts between 77 and 72 percent of the regional employment during each 5-year period.

The employment for each sector generated from Method 1 was adjusted to the forecast total displayed in TABLE 39. The method preserved the proportional change for each sector. The resulting forecast of sectors for Bernalillo County is displayed at the end of this Part.

TABLE 39 FORECAST OF EMPLOYMENT FOR BERNALILLO COUNTY TO 2025

Year	Forecast	Forecast	Forecast:	Percentage of Regional
	Method 1	Method 2	Combination of	Employment in the
			Methods	County
2000	344,911	344,911	344,911	87.89
2005	373,888	369,804	371,846	87.02
2010	407,629	397,496	402,563	86.33
2015	433,560	416,644	425,102	85.72
2020	458,231	434,011	446,121	85.14
2025	482,584	450,575	466,580	84.60

Source: MRCOG

A sector-specific forecast for the total of the other three counties of SPDD3 (Sandoval, Torrance, and Valencia) was generated by subtracting the sector-specific forecast for Bernalillo County from the SPDD3 sector forecast. The generated table for the balance of SPDD3 provided control totals for each sector by year for the sum of the three counties. The sectors for each of the three counties were forecast by a two-step process. Basic employment sectors (agriculture, construction and mining, manufacturing, TCU, wholesale, and military) were forecast in the first step as a share technique. Population serving sectors (retail, FIRE, services, and government) were forecast in a second step as a ratio to county population.

The share technique for generating the sector-specific forecasts for the basic sectors combined the sector-specific trends for each county with the long term projections for each sector. Agriculture was forecast as a constant proportion, in other words, the proportion of the three-county total of agricultural employment for each county was held constant over the 25-year forecast. The variable for the forecast of agriculture was the change in the three-county total which was derived from REMI model output. All of the military employment for the three-county area was assigned to Sandoval County (the Hawk Missile site). A trend line was computed for each of the remaining four basic sectors (construction and mining, manufacturing, TCU, and wholesale) by county from NMDOL nonagricultural wage and salary data for 1982, 1990, and 1996 through 2000. Some data points for manufacturing were missing due to NMDOL data suppression rules, the suppressed data was estimated by using data in MRCOG files. Prior to 1990, NMDOL reported wholesale and retail as a combined category called trade. The trend analysis was based on the proportion of each basic sector located in each county (employment in sector j in county k divided by the three-county employment in sector j). Therefore, the trend expressed the projection of the future county proportion of each basic sector. The projected proportions were summed by sector and proportionately adjusted to sum to one. The percentage change for each sector was computed for each forecast period. The computed percentages were applied to the 2000 data for each sector by county and balanced to the sector control totals for the three-county area.

Population serving sectors (retail, FIRE, services, and government) were forecast by projecting the ratios of these sectors to the respective county populations. Trend lines were calculated from population data and NMDOL nonagricultural wage and salary data for 1982, 1990, and 1996 through 2000. NMDOL reported data that was affected by suppression rules were adjusted with information in MRCOG files. Population data for years other than decennial census years came from Bureau of Census county population estimates that were adjusted after the subsequent decennial census. It was expected that the size of these sectors in each county would be a function of the population since the employment in these sectors for these three counties is primarily to serve the local population. There were a few notable exceptions such as the private prison employment in the services sector in Torrance County and the State prison employment (and previously the Los Lunas Training School employment) in the government sector in Valencia County. These exceptions were considered when developing the respective trends. The projected ratios for the forecast years were applied to the respective county population forecasts to produce an initial sector-specific result. The initial results were proportionately balanced to the three-county sector control totals that had previously been derived. The forecast sectors for both basic and population serving employment were summed to produce county totals for Sandoval, Torrance, and Valencia Counties. An adjustment for 2005 was made for the two major retail projects currently under development in the Los Lunas area.

A series of tables at the end of this Part displays the regional and county employment forecasts developed from the above methodology. Tables are presented for regional and county employment for both total employment and employment by sector. All growth rates are calculated as average annual compound rates.

#### EMPLOYED RESIDENTS

Employed residents are the total of civilian persons who are employed plus the members of the armed forces. This definition is taken directly from the Census Bureau definition of employed persons and armed forces. There are three components of the forecast of employed residents: 1) a projection of the civilian labor force; 2) a projection of the portion of the civilian labor force that is employed; and 3) a projection of the armed forces. TABLE 40 presents the historical data for characteristics of labor force and employed residents from the Bureau of Census which reports labor force and employed persons as a portion of the civilian population aged 16 and over. The civilian labor force is composed of employed persons and unemployed persons. Total employed residents is the sum of the civilian employed residents and the members of the armed forces.

TABLE 40 LABOR FORCE CHARACTERISTICS, SPDD3, 1980 – 2000

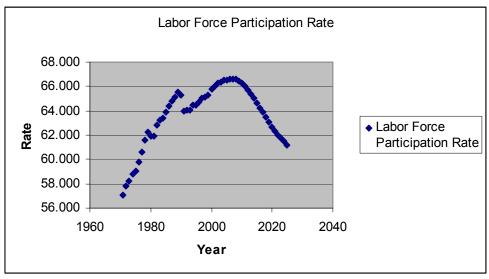
Year	Population	Civilian	Labor Force	Civilians	Percent	Armed	Total
	Age 16	Labor	Participation	Employed	Unemployed	Forces	Employed
	and Over	Force	Rate				Residents
1980	365,870	220,564	60.285	199,439	9.58	7,843	207,282
1990	451,909	295,651	65.423	275,498	6.82	5,622	281,120
2000	558,590	356,363	63.797	335,307	5.91	4,179	339,486

Source: U.S. Census

The size of the civilian labor force can be described by the labor force participation rate which is the percentage of the population 16 and over that is employed or looking for work. One of the more interesting and surprising pieces of data from the 2000 Census was the decline in the civilian labor force participation rate. The national data also reported a decline in the national labor force participation rate from 64.4 in 1990 to 63.4 in 2000. The labor force participation rate had generally been increasing for decades. The REMI model projected that the participation rate would continue to increase until 2007. After 2007, the increasing proportion of persons in older demographic cohorts would push the participation rate down. FIGURE 9 presents the historical labor force participation rate and the projected rates from the REMI model.

The trend for the participation rates since 1971 had two major declines, the largest in the early 1990's, but in general the rate is projected to continue to climb until it peaks in 2007. The Census data (TABLE 40) shows a decline in 2000 compared to 1990. Unfortunately the Census data has just recently been released and has not adequately been analyzed by various agencies that track employment. It is known that sample data currently available to the NMDOL does not confirm the decline in the participation rate reported by the 2000 Census, but the staff at NMDOL is still reviewing the data. Based on a variety of information, MRCOG believes that the 2000 decline in the participation rate reported by the Census is a temporary drop. This drop reported by the Census may be a precursor of an anticipated future downward trend, but for now, the participation rate should resume it upward trend.

FIGURE 9 LABOR FORCE PARTICIPATION RATES 1971 – 2025



Source: REMI

There are a number of factors which affect the labor force participation rate, but certainly demographic trends exert a considerable influence on the rate. The REMI model projection of a downward trend in the participation rate is reasonable given the demographic forecast from BBER. TABLE 41 displays the projected median ages for the region computed from the BBER population forecast. The percentage of the population forecast to be age 65 or over is also presented. MRCOG staff estimated the amount for southern Santa Fe County from the BBER forecast for Santa Fe County combined with the current age-specific ratios for southern Santa Fe County to the entire County. The estimated population by age cohort was added to the BBER projections for the four counties of SPDD3.

TABLE 41
MEDIAN AGE AND PERCENTAGE OF POPULATION AGE 65 AND OVER
MRCOG REGION

Year	Median Age	Percent of Population Age 65 and Over
2000	34.9	11.2
2005	36.3	12.0
2010	37.4	13.2
2015	38.4	15.3
2020	39.3	17.6
2025	40.3	19.8

Source: UNM-BBER

The BBER forecast projects a considerable increase in the percentage of the population age 65 and over between 2005 and 2010. This increase in the 65 and over

population in the BBER forecast corresponds very well with the projected decline in the labor force participation rate by the REMI model after 2007. In general, persons 65 and over participate in the labor force at a much lower rate than persons under 65; therefore, it is reasonable that a large increase in the population 65 and over would be a depressor on the labor force participation rate.

MRCOG used the projected labor force participation rates from the REMI model to project the civilian labor force to 2025. The REMI model calculates the labor force participation rates as a percentage of the population age 15 and over. To check the affect of using a rate for 15 and over rather than a rate for 16 and over, the 1990 rate for 15 and over from the REMI model was multiplied by the 1990 population 15 and over. The computed 1990 labor force was compared to the SPDD3 labor force from 1990 Census data, the two numbers were essentially the same which suggests that an insignificant number of persons under 16 are in the labor force. Since the BBER cohorts also aggregate as 15 and over, it is most convenient to calculate the future labor force from the population age 15. This also provides the most inclusive projection of labor force since it accounts for 15-year olds that may be in the labor force. For comparability with historical Census data, the forecast labor force will be presented as a portion of the population age 16 and over. Therefore, the civilian labor force was calculated by applying the SPDD3 rate from the REMI model to the BBER projection of persons age 15 and over.

An adjustment was made for the labor force projection for 2005. Given the decline for 2000, the rate from 2000 to the peak year of 2007 was projected as a straight line. Therefore, the adjusted rate for 2005 was slightly lower than the rate from the REMI Model.

The regional civilian labor force was calculated by adding a projection of southern Santa Fe County to the SPDD3 projection. The only data currently available for southern Santa Fe County is data for the Town of Edgewood. The labor force participation rate for Edgewood is 98 percent of the SPDD3 rate. The southern Santa Fe County civilian labor force was computed by applying a labor force participation rate that had been adjusted with the factor of 98 percent for the appropriate forecast years.

Civilian employment as a portion of the civilian labor force varies depending on current economic conditions. MRCOG projected civilian employment as a constant percentage of the civilian labor force. The constant percentage was computed as the mean of the average annual employment rates from 1982 through 2001. The mean for the 20 year period was 94.39 percent with a standard deviation of 1.44.

Armed forces for purposes of calculating the labor force includes only active duty personnel, this prevents double counting members of the civilian labor force who are also members of the National Guard or Reserve. This definition differs from the definition of military employment which includes civilians who are serving in the National Guard or Reserve. There is no firm information on how the number of armed forces may change over the term of this forecast, decisions affecting the size of the armed forces in this

region are not related to local trends or conditions that can be modeled. The number of armed forces in 2000 for this region was relatively small (about one percent) so it was best to project this number as a constant.

The forecast of employed residents for the region is summarized in TABLE 42. The reasonability of the forecast is displayed in TABLE 43 by presenting the forecast as percentages of various population cohorts. Since the projection of labor force is the key element in forecasting employed residents, there was a quality check performed on the forecast of labor force.

TABLE 42 SUMMARY OF REGIONAL FORECAST OF EMPLOYED RESIDENTS\*

Year	Civilian Labor	Civilian Employed	Armed Forces	Total Employed
	Force	Residents		Residents
1980	221,072	199,917	7,843	207,760
1990	297,372	277,116	5,622	282,738
2000	360,479	339,180	4,179	343,359
2005	423,788	400,011	4,179	404,190
2010	469,607	443,256	4,179	447,435
2015	495,117	467,333	4,179	471,512
2020	515,850	486,900	4,179	491,079
2025	537,581	507,411	4,179	511,590

Sources: U.S. Bureau of the Census and MRCOG

TABLE 43
RATIOS RELATED TO THE REGIONAL FORECAST OF EMPLOYED RESIDENTS

Year	Population	Population	Civilian	Labor Force	Total	Employed	Employed
	Age 16	Age 16 to	Labor	Participation	Employed	Residents as a	Residents as
	and Over	64	Force	Rate	Residents	Percent of the	a Percent of
						16 and Over	the 16 to 64
						Population	Population*
1980	366,730	324,387	221,072	60.28	207,760	56.65	64.05
1990	454,594	389,707	297,372	65.41	282,738	62.20	72.55
2000	565,168	476,522	360,479	63.78	343,359	60.75	72.06
2005	633,996	543,158	423,788	66.84	404,190	63.75	74.41
2010	697,289	588,110	469,607	67.35	447,435	64.17	76.08
2015	754,875	623,289	495,117	65.59	471,512	62.46	75.65
2020	810,755	655,513	515,850	63.63	491,079	60.57	74.92
2025	865,696	682,940	537,581	62.10	511,590	59.10	74.91

Sources: U.S. Census and MRCOG

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup> This measure is computed as a ratio for illustration, it does not represent the actual percentage of the 16 to 64 population that is employed.

The 1990 age/sex specific labor force participation rates were applied as constants to the BBER age/sex population cohorts to 2025. The resulting projection was an estimate for 2000 higher than that reported by the Census (consistent with the Census reported drop in the overall participation rate). This projection, however, was lower than the forecast for each forecast year 2005 to 2025. In comparing the projection based on the 1990 rates with the forecast for the years 2010 to 2025 (the period of a declining participation rate), the percentage difference between the projection based on 1990 and the forecast is almost constant. This finding demonstrates that the decline in the participation rate after 2007 is almost entirely explained by demographic changes.

The labor force participation rate is displayed in TABLE 43, the rate increases and then declines to a rate lower than the rate reported on the 2000 Census. The forecast employed residents was divided by the forecast population 16 and over (assuming the number of persons under 16 in the labor force is insignificant). It is shown that the percentage of the 16 and over population that is employed increases and then declines to a rate slightly lower than reported in the 2000 Census. The effect of the aging population can be seen by computing a ratio, expressed as a percentage, of the employed residents divided by the population age 16 to 64. The 16 to 64 population is the core of the work force; this ratio will show how the forecast of employed residents compares to the change in the core employment cohort. It is seen that the ratio of employed residents to the 16 to 64 population increases and then declines but in 2025 is still higher than the 2000 rate. Therefore, if the actual participation rates for the 16 to 64 cohorts were calculated it would show a slight increase which would be in keeping with the trend of the recent decades. Again, the data emphasizes the effect of the aging of the population.

A final consistency check was required. Employment and employed residents are separate measures, however, there is an obvious link between the two variables in that the jobs are occupied by the workers. There is not a one-to-one correspondence, there are several factors that contribute to the difference between the estimate of employment and the estimate of employed residents. These factors include at least the following: 1) A worker may hold two or more jobs. 2) Employed persons living elsewhere commute into the region to occupy jobs in this region. 3) Employed residents of this region commute out of the region to occupy jobs elsewhere. 4) Estimates of employment and employed residents are produced from independent samples, each sample contains sampling errors; the sampling errors from the various sources may be additive or offsetting. Nevertheless, it is appropriate to compare the forecasts of employment and employed residents to ensure that the forecasts are compatible within a reasonable range.

The BLS produces national estimates of the percentage of the employed persons who are multiple jobholders. Over the 32 year period from 1970 to 2001, the BLS has conducted 22 annual surveys to estimate the percentage of multiple jobholders. The BLS estimates of multiple jobholders have ranged from a high of 6.2 percent to a low of 4.5 percent with a mean percentage of 5.38. There are no local or regional surveys or estimates of multiple jobholders. MRCOG believes that the local percentage of multiple jobholders is probably higher due to the characteristics of the local economy. Data from the past three Census samples (1980 – 2000) compared with estimates of employment

generally supports the opinion that the local percentage is higher than the national average. The mean for the difference between the employed persons and the estimate of employment for 1980, 1990, and 2000 was 9.3 percent. However, this percentage is a very soft number since it is based on the difference between numbers generated by very different samples. In addition, the 9.3 percent reflects more than multiple jobholders. Still, both of these numbers can be used as a guide for checking the consistency of the employment and employed resident forecasts. TABLE 44 reports the forecast employment and the employed residents along with a calculation of the implied employment if the only difference between employment and employed residents were multiple jobholders and the percent of multiple jobholders equaled the mean BLS percentage. A second calculation is performed based on the average 9.3 percent difference in the local numbers. This second calculation, by implication, includes not only multiple jobholders but also the affect of commuting and sample error. The employed residents was increased by both the BLS mean of 5.38 percent and the local estimate of 9.3 percent to produce approximations of the number of jobs implied by the number of employed residents. Ideally, the forecast of employment should be in the neighborhood of one or the other of these approximations.

In the Census year of 2000, the estimated employment exceeded the upper approximation by a considerable amount. Out of the five forecast years, the forecast of employment was within the range of the BLS (lower) and local (higher) approximations three times. The forecast was just slightly below the range in 2010 and in 2015. This table displays part of the rationale for selecting the average of the three forecast methods as the employment forecast. The table also displays the compatibility between the final employment forecast and the forecast of employed residents.

TABLE 44
CONSISTENCY OF FORECASTS OF EMPLOYMENT AND EMPLOYED
RESIDENTS\*

			Approximation of Employment	Approximation of Employment
			based on BLS	based on Local
		Employed	National	1980 - 2000
Year	Employment	Residents	Average	Average
2000	392,435	343,359	361,598	374,818
2005	427,331	404,190	425,700	441,291
2010	466,293	447,435	471,270	488,547
2015	495,934	471,512	496,642	514,857
2020	523,984	491,079	517,261	536,239
2025	551,533	511,590	538,875	558,652

Source: U.S. Census, NMDOL, and MRCOG

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

### EMPLOYMENT DATA TABLES

TABLE 45
EMPLOYMENT FORECAST TO 2025 FOR THE MRCOG REGION\*

Year	Employment	Annual Growth Rate
2000	392,435	
2001	397,139	1.199
2002	399,765	0.661
2003	408,483	2.181
2004	418,330	2.411
2005	427,331	2.152
2006	435,946	2.016
2010	466,293	1.697
2015	495,934	1.240
2020	523,984	1.106
2025	551,533	1.030

Sources: REMI, NMDOL, and MRCOG.

TABLE 46
EMPLOYMENT BY COUNTY for MID-REGION of NEW MEXICO\*

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	Total
	County	County	County	County	Santa Fe	
1980	209,290	5,126	1,189	7,132	149	222,886
1990	271,670	11,185	2,060	9,124	294	294,333
1995	302,649	21,463	2,581	12,453	470	339,616
2000	344,911	27,447	3,955	14,829	1,293	392,435
2005	371,846	32,674	4,856	16,338	1,617	427,331
2010	402,563	38,249	5,325	18,171	1,985	466,293
2015	425,102	42,967	5,689	19,756	2,420	495,934
2020	446,121	47,659	5,975	21,326	2,903	523,984
2025	466,580	52,414	6,241	22,895	3,403	551,533

Sources: REMI, NMDOL, and MRCOG

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

TABLE 47
EMPLOYMENT BY COUNTY—PERCENTAGE OF REGION

Year	Bernalillo	Sandoval	Torrance	Valencia	Southern	Total*
	County	County	County	County	Santa Fe	
1980	93.90	2.30	0.53	3.20	0.07	100.00
1990	92.30	3.80	0.70	3.10	0.10	100.00
1995	89.12	6.32	0.76	3.67	0.14	100.00
2000	87.89	6.99	1.01	3.78	0.33	100.00
2005	87.02	7.65	1.14	3.82	0.38	100.00
2010	86.33	8.20	1.14	3.90	0.43	100.00
2015	85.72	8.66	1.15	3.98	0.49	100.00
2020	85.14	9.09	1.14	4.07	0.55	100.00
2025	84.60	9.50	1.13	4.15	0.62	100.00

Sources: REMI, NMDOL, and MRCOG

TABLE 48
EMPLOYMENT BY SECTOR -- MID-REGION of NEW MEXICO\*

Year/											
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	4,188	25,819	29,720	22,484	17,515	71,399	23,811	120,352	69,900	7,247	392,435
2001	4,115	26,890	29,929	22,653	17,099	72,554	24,528	121,455	70,875	7,041	397,139
2002	4,042	25,312	29,616	23,110	16,765	73,540	24,803	123,325	72,216	7,036	399,765
2003	3,971	24,955	30,465	23,512	16,911	75,009	25,638	127,240	73,748	7,034	408,483
2004	3,898	25,741	30,996	24,012	17,187	76,598	26,429	131,673	74,764	7,032	418,330
2005	3,825	26,538	31,514	24,409	17,325	78,007	27,013	135,405	76,259	7,036	427,331
2006	3,749	27,143	31,727	24,938	17,424	79,373	27,609	139,225	77,704	7,054	435,946
2010	3,637	26,830	31,464	26,245	17,505	83,644	29,251	154,400	85,646	7,671	466,293
2015	3,562	26,388	31,921	27,181	17,730	87,096	30,609	170,346	93,029	8,072	495,934
2020	3,474	26,517	32,553	27,871	17,753	90,368	31,696	186,382	98,970	8,400	523,984
2025	3,389	26,993	32,926	28,347	17,497	93,673	32,686	202,574	104,706	8,742	551,533

Sources: NMDOL, BBER, REMI, and MRCOG.

Employment sectors are based on Standard Industrial Classification (SIC) categories. The following abbreviations are used. Agri=Agricultural; Constr=Construction and Mining; Manuf=Manufacturing; TCU=Transportation, Communications, and Utilities; Whols=Wholesale Trade; Retail=Retail Trade which include eating and drinking establishments; FIRE=Finance, Insurance, and Real Estate; Service=Lodging, Medical, Education, Professional, Business, Research, Personal, and Entertainment services; Govt=Government, Civilian and Military; Mil=Military enlistment including Reserve and National Guard.

TABLE 49
EMPLOYMENT BY COUNTY BY SECTOR\*

#### **BERNALILLO COUNTY**

Year/											
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	3,305	22,427	21,436	18,691	16,483	61,964	22,192	111,734	59,664	7,015	344,911
2005	2,997	22,737	22,308	20,251	16,258	67,163	24,656	124,538	64,134	6,804	371,846
2010	2,826	22,789	21,963	21,565	16,323	71,258	26,308	140,506	71,586	7,439	402,563
2015	2,743	22,176	22,640	21,941	16,415	73,455	27,220	153,527	77,145	7,840	425,102
2020	2,658	22,045	23,630	22,077	16,322	75,451	27,919	166,475	81,376	8,168	446,121
2025	2,573	22,212	24,553	22,011	15,977	77,444	28,550	179,401	85,349	8,510	466,580

Sources: NMDOL, BBER, REMI, and MRCOG.

<sup>\*</sup> Due to rounding, the columns may not sum to exactly 100 percent.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 50 EMPLOYMENT BY COUNTY BY SECTOR\*

#### SANDOVAL COUNTY

Year/		0 1	M C	TOLL	3371 1	D 4 1	EIDE	О.	G 4	) (°1	TOTAL
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	92	1,777	6,691	2,103	570	4,911	1,069	5,687	4,315	232	27,447
2005	85	2,029	7,326	2,339	611	5,779	1,646	7,230	5,397	232	32,674
2010	83	2,193	7,448	2,706	702	6,621	2,074	9,474	6,716	232	38,249
2015	84	2,320	7,164	3,087	819	7,144	2,400	11,660	8,057	232	42,967
2020	83	2,503	6,780	3,474	924	7,579	2,681	14,007	9,396	232	47,659
2025	83	2,719	6,261	3,868	1,017	8,018	2,939	16,463	10,814	232	52,414

Sources: NMDOL, BBER, REMI, and MRCOG.

# TABLE 51 EMPLOYMENT BY COUNTY BY SECTOR\*

#### TORRANCE COUNTY

Year/											
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	343	405	144	424	115	753	42	586	1,143	0	3,955
2005	316	471	144	424	133	839	95	905	1,529	0	4,856
2010	309	518	131	430	171	841	121	1,137	1,667	0	5,325
2015	313	557	111	437	205	847	140	1,327	1,752	0	5,689
2020	312	610	91	395	247	853	156	1,509	1,802	0	5,975
2025	313	673	70	325	285	860	169	1,699	1,847	0	6,241

Sources: NMDOL, BBER, REMI, and MRCOG.

# TABLE 52 EMPLOYMENT BY COUNTY BY SECTOR\*

#### VALENCIA COUNTY

Year/											
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	309	954	1,434	1,107	264	3,482	474	2,220	4,585	0	14,829
2005	284	1,039	1,721	1,232	236	3,799	557	2,513	4,957	0	16,338
2010	278	1,070	1,907	1,383	223	4,328	655	2,943	5,384	0	18,171
2015	282	1,076	1,991	1,556	205	4,856	716	3,344	5,730	0	19,756
2020	282	1,102	2,037	1,766	175	5,471	761	3,731	6,001	0	21,326
2025	282	1,135	2,027	1,986	134	6,109	798	4,166	6,258	0	22,895

Sources: NMDOL, BBER, REMI, and MRCOG.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 53 EMPLOYMENT BY COUNTY BY SECTOR\*

#### SOUTHERN SANTA FE COUNTY

Year/		_									
Sector	Agri	Constr	Manuf	TCU	Whols	Retail	FIRE	Service	Govt	Mil	TOTAL
2000	139	256	15	159	83	289	34	125	193	0	1,293
2005	143	262	15	163	87	427	59	219	242	0	1,617
2010	141	260	15	161	86	596	93	340	293	0	1,985
2015	140	259	15	160	86	794	133	488	345	0	2,420
2020	139	257	15	159	85	1,014	179	660	395	0	2,903
2025	138	254	15	157	84	1,242	230	845	438	0	3,403

Sources: NMDOL, BBER, REMI, and MRCOG.

# TABLE 54 RATIOS OF POPULATION TO EMPLOYMENT TYPE BY COUNTY

#### **BERNALILLO COUNTY**

Year	Population	Ratio	Ratio	Ratio	Ratio
		Population:	Population:	Population:	Population:
		Basic Emp	Retail Emp	Service Emp	Total Emp
2000	556,678	5.392	8.984	3.098	1.614
2005	595,954	5.663	8.873	2.988	1.603
2010	631,839	5.917	8.867	2.814	1.570
2015	666,114	6.189	9.068	2.730	1.567
2020	698,832	6.424	9.262	2.668	1.566
2025	729,750	6.651	9.423	2.612	1.564

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

Basic Emp=Agriculture, Mining, Construction, Manufacturing, TCU, Wholesale, and Military

Service Emp=FIRE, Services, and civilian Government

TABLE 55
RATIOS OF POPULATION TO EMPLOYMENT TYPE BY COUNTY

### SANDOVAL COUNTY

Year	Population	Ratio	Ratio	Ratio	Ratio
		Population:	Population:	Population:	Population:
		Basic Emp	Retail Emp	Service Emp	Total Emp
2000	89,908	8.004	18.307	7.954	3.276
2005	108,538	8.599	18.781	7.604	3.322
2010	126,294	9.450	19.075	6.915	3.302
2015	144,377	10.534	20.210	6.528	3.360
2020	162,409	11.604	21.429	6.226	3.408
2025	179,998	12.694	22.449	5.957	3.434

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

# TABLE 56 RATIOS OF POPULATION TO EMPLOYMENT TYPE BY COUNTY

#### TORRANCE COUNTY

Year	Population	Ratio	Ratio	Ratio	Ratio
		Population:	Population:	Population:	Population:
		Basic Emp	Retail Emp	Service Emp	Total Emp
2000	16,911	11.818	22.458	9.549	4.276
2005	19,523	13.120	23.269	7.720	4.020
2010	21,690	13.913	25.791	7.415	4.073
2015	23,475	14.464	27.715	7.293	4.126
2020	24,979	15.093	29.284	7.205	4.181
2025	26,318	15.797	30.602	7.084	4.217

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

TABLE 57
RATIOS OF POPULATION TO EMPLOYMENT TYPE BY COUNTY

#### VALENCIA COUNTY

Year	Population	Ratio	Ratio	Ratio	Ratio
		Population:	Population:	Population:	Population:
		Basic Emp	Retail Emp	Service Emp	Total Emp
2000	66,152	16.262	18.998	9.088	4.461
2005	76,512	16.957	20.140	9.532	4.683
2010	86,708	17.837	20.034	9.654	4.772
2015	97,330	19.047	20.043	9.942	4.927
2020	108,064	20.154	19.752	10.299	5.067
2025	118,593	21.314	19.413	10.568	5.180

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

TABLE 58
RATIOS OF POPULATION TO EMPLOYMENT TYPE BY COUNTY

#### SOUTHERN SANTA FE COUNTY

Year	Population	Ratio	Ratio	Ratio	Ratio
		Population:	Population:	Population:	Population:
		Basic Emp	Retail Emp	Service Emp	Total Emp
2000	9,065	13.903	31.367	25.753	7.011
2005	11,363	16.960	26.611	21.852	7.027
2010	13,771	20.771	23.106	18.968	6.938
2015	16,206	24.555	20.411	16.776	6.697
2020	18,538	28.302	18.282	15.023	6.386
2025	20,579	31.758	16.569	13.601	6.047

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

TABLE 59
RATIOS OF POPULATION TO EMPLOYMENT TYPE

#### MID-REGION of NEW MEXICO

Year	Population	Ratio Population	Ratio Population	Ratio Population	Ratio Population:
		: Basic Emp	: Retail Emp	: Service Emp	Total Emp
2000	738,714	6.124	10.346	3.696	1.882
2005	811,890	6.520	10.408	3.612	1.900
2010	880,302	6.919	10.524	3.447	1.888
2015	947,502	7.360	10.879	3.383	1.911
2020	1,012,822	7.764	11.208	3.341	1.933
2025	1,075,238	8.160	11.479	3.297	1.950

Sources: U.S. Census, BBER, NMDOL, REMI, and MRCOG

TABLE 60 EMPLOYMENT BY TYPE BY COUNTY\*

Year/Type/County	2000	2005	2010	2015	2020	2025
Bernalillo						
Basic	103,235	105,233	106,783	107,633	108,778	109,714
Retail	61,964	67,163	71,258	73,455	75,451	77,444
Service	179,712	199,450	224,522	244,014	261,892	279,422
Total	344,911	371,846	402,563	425,102	446,121	466,580
Sandoval						
Basic	11,233	12,622	13,364	13,706	13,996	14,180
Retail	4,911	5,779	6,621	7,144	7,579	8,018
Service	11,303	14,273	18,264	22,117	26,084	30,216
Total	27,447	32,674	38,249	42,967	47,659	52,414
Torrance						
Basic	1,431	1,488	1,559	1,623	1,655	1,666
Retail	753	839	841	847	853	860
Service	1,771	2,529	2,925	3,219	3,467	3,715
Total	3,955	4,856	5,325	5,689	5,975	6,241
Valencia						
Basic	4,068	4,512	4,861	5,110	5,362	5,564
Retail	3,482	3,799	4,328	4,856	5,471	6,109
Service	7,279	8,027	8,982	9,790	10,493	11,222
Total	14,829	16,338	18,171	19,756	21,326	22,895
Southern Santa Fe						
Basic	652	670	663	660	655	648
Retail	289	427	596	794	1,014	1,242
Service	352	520	726	966	1,234	1,513
Total	1,293	1,617	1,985	2,420	2,903	3,403
Regional Total						
Basic	120,619	124,525	127,230	128,732	130,446	131,772
Retail	71,399	78,007	83,644	87,096	90,368	93,673
Service	200,417	224,799	255,419	280,106	303,170	326,088
Total	392,435	427,331	466,293	495,934	523,984	551,533

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

#### PART 6

# FORECAST OF POPULATION, HOUSING AND EMPLOYMENT ON TRIBAL LANDS

A significant portion of the population and employment growth in the MRCOG Region is occurring on Tribal lands. This growth is somewhat independent of the growth in the rest of the region, but still part of the regional socioeconomic totals. Population and employment growth on Tribal lands was forecast separately and combined with the allocations for the Data Analysis Subzones (DASZ) in the balance of the region. The Tribal lands forecast was done first and subtracted from the regional control totals, the remainder after accounting for Tribal lands was available for allocation to the rest of the region.

Tribal lands in the MRCOG region consisted of the lands within the eight Pueblos that are entirely within State Planning and Development District 3 (SPDD3) and the portion of Laguna Pueblo within SPDD3 and the portions of the Jicarilla Apache and Navajo Reservations within SPDD3. The eight Pueblos are: Cochiti, Isleta, Jemez, Sandia, San Felipe, Santa Ana, Santo Domingo, and Zia. Tribal Trust lands within SPDD3 are also included as Tribal lands; three tribes (Laguna, Navajo, and Zia) have Trust lands in this area. An exception was made for Sandia. The Sandia grant line goes through the Town of Bernalillo. The Bureau of the Census has accepted the grant line as the reservation boundary and has included much of the Town of Bernalillo in the population of the Pueblo of Sandia. For purposes of this forecast, the data for Sandia has been adjusted to exclude the Town of Bernalillo as well as the unincorporated subdivision of Bosque del Bernalillo.

Population for Tribal lands in SPDD3 was projected to 2025 with a least squares regression technique based on historical population from 1970 to 2000. The R-square value was .995. The average annual rate of growth on Tribal lands over the past 30 years has been 2.31 percent; however that rate has declined from 3.28 percent during the 1970's to 1.70 percent during the 1990's. In the forecast, the rate of growth is slowed; this slowing is consistent both with the last 30 years and what is projected for the growth rate for SPDD3. Historically, the population on Tribal lands have accounted for just over 2.6 percent of the SPDD3 population, although this percentage has been declining slightly. In the forecast, the slight decline in the percentage of population on Tribal lands is expected to continue so that these lands will account for less than 2.6 percent in the future. TABLE 61 displays the projected population on Tribal lands along with the total SPDD3 population. The average annual rates of growth and the percentage of SPDD3 population on Tribal lands are also displayed.

Population for the various Tribes was forecast with a linear regression equation based on 1970 to 2000 data. The results of the regression projections were balanced to the total forecast population on Tribal lands. The population forecasts by Tribal Areas are presented in TABLE 63 at the end of this Part.

TABLE 61 FORECAST POPULATION ON TRIBAL LANDS\*

Year	Population in SPDD3**	Population on Tribal	Percent of Population	Average Annual	Average Annual
		Lands	on Tribal	Growth Rate	Growth Rate
			Lands	in SPDD3*	on Tribal
					Lands
1970	359,007	9,598	2.67		
1980	492,759	13,252	2.69	3.22	3.28
1990	599,416	16,113	2.69	1.98	1.97
2000	729,649	19,066	2.61	1.99	1.70
2005	800,527	20,707	2.60	1.56	1.59
2010	866,531	22,270	2.57	1.48	1.47
2015	931,296	23,833	2.56	1.40	1.37
2020	994,284	25,396	2.55	1.40	1.28
2025	1,054,659	26,959	2.56	1.26	1.21

Sources: U.S. Bureau of the Census and MRCOG

Housing was calculated from the population forecast. Historical census data from 1980 through 2000 for housing units for each Tribal area was collected. A ratio of persons per dwelling unit was calculated for each area for each of the three data points by dividing population by housing units. Ratios were also calculated for the total population on Tribal lands divided by the total housing units. Regression equations were computed for each Tribe and for the total; the x-coefficient for the respective Tribe was used to project future ratios of persons per dwelling unit except for two situations. For Tribal areas that currently have ratios below the ratio for the entire region, the current ratio was held constant and for tribal areas where the R-square value was not acceptable, the future ratios were based on the projected decline in the ratio for the total Tribal lands. The forecast of housing units by Tribal Areas are displayed in TABLE 64 at the end of this Part

Employment for Tribal lands was forecast by computing ratios for various types of employment. Estimated 2000 employment was divided into three employment types: Basic (which consisted of agricultural, mining, construction, manufacturing, transportation, communications, utilities, wholesale, and military employment); Population-serving (which consisted of retail, finance, insurance, real estate, service except for casino, and government employment); and Casino. A ratio of Basic employment to population in 2000 was computed for the sum of all Tribal lands. There was an assumption that this ratio would remain constant, therefore, total Basic employment on all Tribal lands for future years was computed by applying the ratio to the forecast population on Tribal lands. A second ratio was computed; Population-serving employment to population was calculated for Tribal lands and also for the non-metropolitan (excluding Tribal lands) portion of the MRCOG Region. In 2000, the

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*\*</sup>State Planning and Development District 3

Population-serving ratio on all Tribal lands was .1309 jobs per person. This was slightly lower than the ratio of .1517 in the non-metropolitan portion of the region. An assumption was made that the Population-serving ratio on Tribal lands would increase to be equal to the current ratio in the non-metropolitan portion of the region. Casino employment for 2005 was forecast by calculating the current ratio of casino employment to total SPDD3 population and applying that ratio to the 2005 forecast of SPDD3 population. Current casino employment was calculated by adding the 2000 casino employment and the new casino employment that has come online since 2000 with expansions at Santa Ana, Isleta, and Sandia. Expansion in the casino employment beyond 2005 was based on the REMI Model. The current period to 2005 seems to still be part of the casino expansion due to recent legalization. Beyond 2005, casino employment expansion should be related to population and economic factors.

Employment by Standard Industrial Classification (SIC) sector was forecast using the REMI Model. Employment by SIC for SPDD3 was obtained from the REMI Model. Employment by SIC on Tribal lands was obtained from the MRCOG 2000 Employment Data Set. An assumption was made that the increase in employment by SIC sector on Tribal lands would be proportionately the same as the SIC sector-specific increases for SPDD3. An exception was the service sector which was adjusted for the large increases in casino employment in the 2000 to 2005 period. The SIC sector-specific percentage increases by 5-year interval were applied to the Tribal lands data. The preliminary results for the SIC sector-specific projections were adjusted to the previously forecast employment totals for Tribal lands. Forecast employment by SIC sector is provided in TABLE 62.

TABLE 62
EMPLOYMENT ON TRIBAL LANDS BY SIC\* SECTOR\*\*

SIC Sector	2000	2005	2010	2015	2020	2025
Agriculture	125	135	131	131	130	129
Construction	332	440	475	501	533	572
Manufacturing	6	8	8	8	8	7
Transportation, Communications,						
Utilities	77	100	113	127	141	154
Wholesale Trade	143	174	195	219	239	254
Retail Trade	237	769	1,041	1,230	1,423	1,623
Finance, Insurance, Real Estate	83	117	141	161	177	190
Services	4,178	8,578	10,102	10,863	11,697	12,605
Government	594	732	831	928	1,027	1,130
Total Employment	5,775	11,053	13,037	14,168	15,375	16,664

Sources: New Mexico Department of Labor, REMI, and MRCOG

Employment by SIC sector was forecast for the various Tribes by allocating the increase in employment in each SIC sector to the Tribes depending on the proportion of that SIC sector in their 2000 economy. Adjustments were made for the known increase in casino (service) employment at Santa Ana, Isleta, and Sandia. The Tribal allocations were balanced to the SIC sector and total employment control totals with a fratar method.

<sup>\*</sup>Standard Industrial Classification

<sup>\*\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

Employment forecasts by Tribal Areas are presented in TABLE 65. It can be seen that while the percentage of the regional population on Tribal Lands is forecast to remain relatively constant, the percentage of the regional employment on Tribal Lands is expected to increase.

TABLE 63
POPULATION FOR INDIAN TRIBAL AREAS AND TRUST AREAS
1970 - 2025\*

TRIBAL AREA	1970	1980	1990	2000	2005	2010	2015	2020	2025
COCHITI***	439	839	1,328	1,502	1,692	1,876	2,061	2,245	2,429
ISLETA	1,816	2,412	2,915	3,166	3,407	3,635	3,862	4,090	4,318
JEMEZ	1,052	1,515	1,750	1,958	2,114	2,262	2,410	2,558	2,706
JICARILLA									
APACHE**	6	19	15	11	12	13	14	15	16
LAGUNA**	5	5	13	20	23	26	29	32	35
NAVAJO,									
TO'HAJIILEE**	554	848	1,072	1,522	1,684	1,840	1,996	2,153	2,309
NAVAJO,									
TRUST									
LANDS**	1,454	1,965	1,919	2,774	2,981	3,177	3,373	3,569	3,765
SANDIA****	162	227	445	629	713	794	875	956	1,037
SAN FELIPE	1,564	2,327	2,434	3,185	3,446	3,694	3,942	4,190	4,438
SANTA ANA	309	409	593	487	525	561	597	633	669
SANTO									
DOMINGO**	1,823	2,162	2,992	3,166	3,421	3,663	3,906	4,147	4,389
ZIA	414	524	637	646	689	729	768	808	848
TOTAL	9,598	13,252	16,113	19,066	20,707	22,270	23,833	25,396	26,959
Annual Growth									
Rate		3.28%	1.97%	1.70%	1.59%	1.47%	1.37%	1.28%	1.20%
Total Regional									
Population	359,303	493,944	603,116	738,714	811,890	880,302	947,502	1,012,822	1,075,238
Percent of									
Regional Total									
on Tribal Lands	2.671	2.683	2.672	2.581	2.550	2.530	2.515	2.507	2.507

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

Sources: 1970 data is from various 1970 Bureau of Census reports.

1980 data is from the Bureau of Census publication PC80-1-B33.

1990 data is from the 1990 Census Summary Tape File 1.

2000 data is from the 2000 Census Public Law File.

<sup>\*\*</sup> Population within MRCOG region

<sup>\*\*\*</sup> The Census reports for Cochiti Pueblo all of the population within the Pueblo which includes the unincorporated town of Cochiti Lake which is on land leased from the Tribe. Since the Tribe retains jurisdiction over this area, the population reported for Cochiti includes Cochiti Lake.

<sup>\*\*\*\*</sup>The Census reports for Sandia Pueblo all of the population within the Sandia Grant which includes a large portion of the Town of Bernalillo, for purposes of this table the population in the Town of Bernalillo and the unincorporated area of Bosque del Bernalillo have been excluded from the Sandia population estimate.

TABLE 64 HOUSING UNITS FOR INDIAN TRIBAL AREAS AND TRUST AREAS 1980 - 2025\*

TRIBAL AREA	1980	1990	2000	2005	2010	2015	2020	2025
COCHITI***	319	519	625	721	819	908	998	1,094
ISLETA	901	1,032	1,204	1,302	1,395	1,489	1,584	1,680
JEMEZ	417	449	504	555	607	660	715	772
JICARILLA								
APACHE**	5	5	7	8	8	9	10	10
LAGUNA**	3	9	16	18	21	23	26	28
NAVAJO,								
TO'HAJIILEE**	124	258	473	534	596	660	728	798
NAVAJO,								
TRUST								
LANDS**	n/a	688	961	1,054	1,147	1,244	1,345	1,450
SANDIA****	95	160	250	289	329	370	413	457
SAN FELIPE	513	582	738	815	892	972	1,056	1,144
SANTA ANA	181	248	197	208	227	247	267	289
SANTO								
DOMINGO**	451	494	601	663	725	789	856	927
ZIA	132	167	189	210	232	256	282	311
TOTAL	3,141	4,611	5,765	6,377	6,998	7,627	8,280	8,960

<sup>\*</sup> Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

Sources: 1980 data is from the 1980 Census Summary Tape File 1.

1990 data is from the 1990 Census Summary Tape File 1.

2000 data is from the 2000 Census Public Law File.

<sup>\*\*</sup> Housing units within MRCOG region

<sup>\*\*\*</sup> The Census reports for Cochiti Pueblo all of the housing units within the Pueblo which includes the unincorporated town of Cochiti Lake which is on land leased from the Tribe. Since the Tribe retains jurisdiction over this area, the housing reported for Cochiti includes Cochiti Lake.

<sup>\*\*\*\*</sup>The Census reports for Sandia Pueblo all of the housing units within the Sandia Grant which includes a large portion of the Town of Bernalillo, for purposes of this table the housing in the Town of Bernalillo and the unincorporated area of Bosque del Bernalillo have been excluded from the Sandia housing estimate.

TABLE 65

EMPLOYMENT FOR INDIAN TRIBAL AREAS AND TRUST AREAS 1995 - 2025\*

TRIBAL AREA	1995	2000	2005	2010	2015	2020	2025
COCHITI***	110	225	284	309	332	360	390
ISLETA	979	1,537	2,626	2,860	3,064	3,325	3,604
JEMEZ	255	264	331	360	386	419	454
JICARILLA							
APACHE**	10	69	286	311	333	361	391
LAGUNA**	0	0	199	719	770	836	906
NAVAJO,							
TO'HAJILEE*	50	186	233	754	1,008	1,094	1,186
NAVAJO, TRUST							
LANDS**	75	82	103	112	120	130	141
SANDIA	763	1,413	2,621	2,854	3,058	3,319	3,597
SAN FELIPE	180	607	1,161	1,264	1,354	1,469	1,592
SANTA ANA	434	1,273	2,745	2,989	3,202	3,475	3,767
SANTO DOMINGO**	133	289	362	394	422	458	496
ZIA	71	81	102	111	119	129	140
TOTAL	3,060	6,026	11,053	13,037	14,168	15,375	16,664
Total Regional							
Employment	339,146	392,435	427,331	466,293	495,934	523,984	551,533
Percent of Regional							·
Total on Tribal Lands	0.90	1.54	2.59	2.80	2.86	2.93	3.02

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

Sources: New Mexico Department of Labor, U.S. Bureau of the Census and MRCOG.

<sup>\*\*</sup> Employment within MRCOG region

<sup>\*\*\*</sup> Employment is reported for Cochiti Pueblo including the unincorporated town of Cochiti Lake which is on land leased from the Tribe. Since the Tribe retains jurisdiction over this area, the employment reported for Cochiti includes Cochiti Lake.

<sup>\*\*\*\*</sup> Employment for Sandia Pueblo excludes the portion of the Sandia Grant which includes a large portion of the Town of Bernalillo and the unincorporated area of Bosque del Bernalillo.

#### **PART 7**

#### FORECAST FOR KIRTLAND AIR FORCE BASE

Population, housing, and employment for Kirtland Air Force Base (KAFB) are allocated prior to the Land Use Analysis Model (LAM) allocation. The allocation to KAFB is subtracted from the MRCOG Regional control total for the respective variable and year prior to calculating the inputs for the LAM allocation. The forecast is based on historical data and information provided by KAFB. Historical data for KAFB is provided in TABLE 66.

TABLE 66
KIRTLAND AIR FORCE BASE POPULATION, HOUSING, AND EMPLOYMENT 1980 – 2000

Year	Population	Population	Housing	Occupied	Persons	Employment
	in	in	Units	Housing	per	
	Households	Dormitories		Units	Household	
1980	7,099	664	2,131	1,896	3.74	17,144
1985	7,450	664	2,134	n/a	n/a	19,630
1990	7,721	868	2,394	2,268	3.40	20,907
1995	7,930	868	2,394	n/a	n/a	20,327
2000	5,193	431	1,877	1,570	3.31	20,276

Source: U.S. Bureau of the Census and MRCOG estimates.

Housing units have declined in the past few years due to the demolition of a number of units. The current phase of demolitions is expected to continue until about 2008. During this time a number of new units will be constructed, however, the number of new units will be less than the number demolished. Another phase of demolition should occur after 2015. Information from personnel at KAFB was used to project the future number of housing units.

The persons per household (household size) has declined since 1980. The Council of Governments did not have information on occupied housing units in the years 1985 and 1995 when there was not a Bureau of Census count. The decline in household size tracks with the decline in household size for the MRCOG Region. TABLE 67 displays the persons per household for KAFB and for the region; a ratio is computed for these two household size values. The ratios for 1990 and 2000 are almost identical and only slightly different from the 1980 ratio. Given the near identical ratios for the past two census counts, the average of these two ratios was used to project the future household size on KAFB. The average ratio was calculated as 1.298.

TABLE 68 displays the future housing units based on information from KAFB and an estimate of the expected occupied housing unit. The average housing occupancy rate on KAFB for the last three census counts was 89.12 percent, this percentage was

used to calculate the expected number of occupied housing units. TABLE 68 also displays the projected persons per household for KAFB computed from the previously forecast average household size for the region. The final column in the Table presents the forecast population in households.

TABLE 67 COMPARISON OF PERSONS PER HOUSEHOLD FOR KIRTLAND AIR FORCE BASE AND MRCOG REGION

Year	KAFB Persons per Household	MRCOG Region Persons per Household	Ratio of KAFB to MRCOG Region	
1980	3.74	2.79	1.342	
1990	3.40	2.62	1.299	
2000	3.31	2.55	1.297	

Source: U.S. Bureau of the Census

TABLE 68 FORECAST OF POPULATION IN HOUSEHOLDS\*

Year	Housing	Occupied	Persons per	Persons per	Population	
	Units	Housing	Households	Household-	in	
		Units	on KAFB	Region	Households	
2000	1,877	1,570	3.31	2.55	5,193	
2005	1,634	1,456	3.28	2.53	4,782	
2010	1,391	1,240	3.23	2.49	4,008	
2015	1,391	1,240	3.21	2.47	3,976	
2020	1,164	1,037	3.17	2.44	3,285	
2025	1,164	1,037	3.14	2.42	3,258	

Source: U.S. Bureau of the Census

In 1990, five percent of the housing units were multifamily. The 2000, the Census reported a higher percentage of housing units to be multifamily. There are two issues related to this change: 1) In 1990, the question of housing structure type was asked of all respondents; in 2000, the question of structure type was asked only of a sample. 2) No additional multifamily housing was built on KAFB in the 1990's but there was a demolition of both single and multifamily housing. The information that MRCOG has is that new housing to be built on KAFB will be single family units, although that is subject to change. It is also the understanding of MRCOG that many of the units to be demolished are multifamily units. Given the uncertainty regarding the type of housing to be built on KAFB as well as the type being demolished, an assumption was made that five percent of the housing in the future would to be multifamily.

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

Population in dormitories was held constant at the level of the 2000 Census count. The Council of Governments does not have information on the future number of personnel that may be in military quarters. The sum of the projected population in households and population in dormitories was the total population for KAFB.

Employment on KAFB has been relatively stable since 1990 (TABLE 66). Future employment levels on the Base are entirely in the hands of the United States Department of Defense and Department of Energy. There is no statistical method to predict what either of these Federal departments may do over the next several years much less the next 25 years. Given the recent stability of the employment level, the most reasonable forecast would seem to be to project the future as the average of the employment levels for 1990, 1995, and 2000. Therefore employment is forecast as 20,503. TABLE 69 presents a summary of the forecast population, housing units, and employment.

TABLE 69
FORECAST OF POPULATION, HOUSING, AND EMPLOYMENT\*
KIRTLAND AIR FORCE BASE

Year	Population	Population	Households**	Housing	Single	Multifamily	Employment	
		in		Units	Family	Units		
		Households			Units			
2005	5,213	4,782	1,456	1,634	1,552	82	20,503	
2010	4,439	4,008	1,240	1,391	1,321	70	20,503	
2015	4,407	3,976	1,240	1,391	1,321	70	20,503	
2020	3,716	3,285	1,037	1,164	1,106	58	20,503	
2025	3,689	3,258	1,037	1,164	1,106	58	20,503	

<sup>\*</sup>Due to rounding the DASZ forecast data sets may not total exactly to these numbers.

<sup>\*\*</sup>Households are equivalent to occupied housing units.

#### PART 8

#### FORECAST OF OTHER VARIABLES

The MRCOG Transportation Model requires several other variables as input. These variables include the following:

- Income Category
- Elementary school enrollment
- Elementary school location
- Elementary school attendance area
- Middle school enrollment
- Middle school location
- Middle school attendance area
- High school enrollment
- High school location
- High school attendance area
- University of New Mexico (UNM) enrollment
- Technical-Vocational Institute (TVI) enrollment
- Dormitory population

These variables can be grouped into four groups: Income, Public Schools, UNM, and TVI. The forecast methodology for each of these groups is discussed in the following sections.

#### Income

The MRCOG Transportation Model requires that each DASZ with one or more households must be categorized into one of five income categories ranked from lowest (1) income to highest income (5). DASZs outside the transportation modeling area are not categorized. To categorize the DASZs for the 2000 data set, an estimate of the median household income for each DASZ was computed from Bureau of Census data. Initially the income estimates were calculated by MRCOG staff based on block group data from the Summary File 3. After receipt of the Census Transportation Planning Package (CTPP), the income estimates for nearly all of the DASZs were generated by the Census Bureau directly from the census responses. The DASZs were arranged by median household income and divided into quintiles. The lowest income quintile was coded '1', the next lowest was coded '2', and so forth until all DASZs in the modeling area with households had been coded.

The categorization of DASZs for 2005 was generated by MRCOG staff based on an assessment of the value of housing in the various DASZs. The assumption was that the value of new housing is a reasonable indicator of the general income level of the new residents. MRCOG staff identified the DASZs that were projected to have households in 2005 but had no households, hence an income category of '0' in 2000. MRCOG staff also identified any DASZs that were projected to more than double in the number of households from 2000 to 2005.

DASZs that had no households in 2000 but had households in 2005 were assigned an income category based on MRCOG staff knowledge of the general value of the housing being built in the respective DASZ. MRCOG staff considered the housing currently being added to the respective DASZ or planned to be added by 2005 and estimated the approximate housing value based on available information. For DASZs that were expected to more than double their number of households by 2005, MRCOG staff made a determination as to whether the new housing was in the same general price range as the existing housing or if the new housing differed enough to change the income characteristics of the particular DASZ. If the MRCOG assessment was that the new housing was sufficiently different to indicate that the income category of the particular DASZ would be different in 2005, MRCOG staff changed the income category for that DASZ to a more appropriate category.

After assigning or reassigning income categories to the selected DASZs, the number of DASZs in each income category or quintile was likely no longer equal. To equalize the categories so that the 2005 distribution would be quintiles, all DASZs in the transportation modeling area were sorted by the income category. The number of DASZs in each category (1 through 5) was counted to determine which categories had excess or a deficient number of DASZs. To balance the number of DASZs in each category, MRCOG staff moved some DASZs from one category to an adjacent category. MRCOG did not feel that the categories had to be exactly equal, only approximately equal. In moving DASZs, MRCOG staff returned to the original 2000 distribution of DASZs by median household income and examined the DASZs that were either just below or just above a category break. In moving a DASZ up, generally the DASZ at the top of its category was the prime candidate to be moved to a higher income category. The only exception was if a DASZ with a slightly lower median household income had experienced considerable growth but the DASZ had not been recoded in the earlier consideration of DASZs that had more than doubled their number of households. In moving a DASZ down, generally the DASZ at the bottom of its category was the prime candidate to be moved to a lower income category. Exceptions to this could occur if the candidate DASZ to be moved down had experience new growth (not earlier considered) which was equal or higher in value than the existing housing. If two or more DASZs were very close in 2000 median household income and neither had experienced new growth, the DASZ with the larger proportion of multifamily housing was moved down.

Income category assignments for 2010 and subsequent years were accomplished in a manner similar to the assignment of codes for 2005. The major difference had to do with the MRCOG assessment of housing value. Beyond 2005, the value of new housing in an area was less certain. MRCOG staff made use of any available information regarding the relative value of future housing. Where there was no information on the likely value of future housing, MRCOG staff used the housing value for an adjacent DASZ that seemed to be most similar in development to the forecast development in the DASZ under consideration.

#### **School Variables**

Public school locations, attendance areas, and enrollments were generated for the MRCOG Transportation Model. 2000 data was collected by MRCOG from each of the six public School Districts within the transportation modeling area. DASZs were coded for public schools located within the respective DASZ boundaries. Each DASZ was then coded to the appropriate elementary school, middle school, and high school attendance area. Since DASZ boundaries generally do not correspond to attendance area boundaries, DASZs that were split by an attendance area boundary were coded to the school that contained the largest proportion of the housing in the split DASZ.

For 2005, new schools were added based on plans that had been obtained from each of the six School Districts by MRCOG staff. The attendance areas were modified to accommodate the new schools that were added. MRCOG staff used an ArcView extension built by Planning Technologies, Inc.; this extension referred to as the School Module is discussed in Socioeconomic Forecasts for Development of the 2025 Metropolitan Transportation Plan, TM-128 on pages 44 and 45 published in April 2001. This is a geographic information system tool that allows the user to efficiently group DASZs and calculate the population residing in households for each group. In modifying school attendance boundaries, MRCOG staff used the following population guidelines for attendance areas:

- Elementary schools should have a resident population of about 7,000;
- Middle schools should have a resident population of about 27,000;
- High schools should have a resident population of about 46,000.

However, MRCOG staff resisted changing attendance boundaries in established areas despite the size of the resident population. In all cases, boundary changes were directly related to developing an attendance area for a new school.

Beyond 2005, MRCOG had little information about the location of potential schools since most Districts in this area plan only about five years into the future. Therefore, MRCOG added new schools in 2010 and beyond as they were warranted by population growth. Where MRCOG had information about a potential school site, MRCOG staff located a needed school on the potential site. In areas where projected population growth clearly warranted a new school but there were no known potential sites, MRCOG staff located a school at a reasonable and appropriate location.

After the school locations and attendance areas had been determined, the next set of variables was that of school enrollment. The total public school enrollment for the region was forecast based on 2000 data from the Bureau of the Census and the various School Districts. Anyone familiar with school data is aware that the count of number of students varies throughout the school year. MRCOG selected appropriate school data to associate with the Bureau of Census 2000 data and estimated that 78.51 percent of the age 5 to 18 population of the Region was enrolled in public schools. It was assumed that this percentage would remain constant through 2025. In examining data from the 1990's, it was determined that the students should be allocated as follows: 49.99 percent in elementary schools; 23.78 percent in middle schools; and 26.23 percent in high schools. It is understood that not all Districts define elementary, middle, and high in exactly the

same way. For purposes of calculation, elementary was defined as through 5<sup>th</sup> grade; middle school was defined as 6<sup>th</sup> through 8<sup>th</sup> grades, and high school was 9<sup>th</sup> through 12<sup>th</sup>. Individual adjustments in determining enrollments were made for districts or individual schools that deviated from this definition. The forecast by year and school type is presented in TABLE 70.

TABLE 70 FORECAST SCHOOL ENROLLMENT BY SCHOOL TYPE

Year	Population	Projected	Elementary	Middle	High School	
	Age 5 - 18	Total School School		School	Enrollment	
		Enrollment	Enrollment	Enrollment		
2005	157,614	123,743	61,865	29,417	32,460	
2010	160,136	125,723	62,855	29,888	32,980	
2015	165,218	129,713	64,850	30,837	34,026	
2020	174,429	136,944	68,465	32,556	35,923	
2025	182,496	143,278	71,632	34,061	37,585	

Source: U.S. Bureau of the Census and MRCOG

Based on previous work, MRCOG had established equations from a regression analysis for computing the enrollment of the individual school attendance areas. The following three equations were used to generate initial estimates of attendance for each school:

Elementary Enrollment = (population in households \* .0462) + (average household size \* 97.9525)

Middle School Enrollment = (population in households \* .0240) + (average household size \* 126.4251)

High School Enrollment = (population in households \* .0258) + (average household size \* 318.1866)

The results of these equations were balanced to the Regional totals in TABLE 70.

#### UNM

Previous work by MRCOG had shown a relationship between the age 18 to 29 population of the State of New Mexico and the University of New Mexico Albuquerque campus enrollment. For this project, data from 1990 to 2000 was collected; it was found that the UNM-Albuquerque enrollment for this period was an average of 8.23 percent of the age 18 to 29 population of the State. UNM-Albuquerque enrollment to 2025 was projected by calculating 8.23 percent of the age 18 to 29 population of the State as projected by BBER.

There is also a UNM campus in Valencia County. MRCOG believes that most of the students at the UNM-Valencia campus are from Valencia County. Using similar logic and the available data for the Valencia campus, the Valencia campus was forecast as 15.79 percent of the age 18 to 29 population of Valencia County. TABLE 71 summarizes the projections for both the UNM-Albuquerque campus and the UNM-

Valencia campus. It is noted that UNM-Albuquerque enrollment is expected to peak about 2015.

TABLE 71 FORECAST ENROLLMENT FOR UNM

Year	New Mexico Population	Population   Population   Al		Valencia County	UNM- Valencia
		Age 18 - 29	Enrollment	Population Age 18 - 29	Enrollment
2005	1,970,982	334,062	27,478	11,892	1,878
2010	2,112,957	368,576	30,317	15,102	2,384
2015	2,251,249	370,668	30,489	16,896	2,668
2020	2,382,999	361,963	29,773	17,288	2,729
2025	2,507,378	362,590	29,824	17,686	2,792

Sources: BBER and MRCOG

#### TVI

The Technical-Vocational Institute, to the knowledge of MRCOG, draws most of its students from the MRCOG Region. TVI, however, presents a projection problem in that its enrollment is growing. An analysis of the TVI enrollment compared to the regional population shows that the enrollment is an increasing proportion of the Region's 18 to 29 year-old population. Realistically, the school probably cannot continue to increase this proportion but there is also no reason to believe that the proportion has reached its maximum. In 2000, the TVI enrollment for the Day Division was 14.2 percent of the population age 18 to 29 of the four counties of Bernalillo, Sandoval, Torrance, and Valencia. At the same time, a regression of the TVI enrollment on the population age 18 to 29 of the four counties from 1990 through 2000 produced a linear trend with an R-square value of .86. Population data for the four counties was used rather than the Regional population due to the lack of available historical data for age 18 to 29 persons in southern Santa Fe County.

MRCOG determined to calculate the projection of the TVI Day Division enrollment by combining the results of the linear trend with holding the 2000 percentage constant. In other words, forecast years were projected by two methods (constant percentage and linear trend) and the results of these two methods were averaged. Only the Day Division enrollment was projected as this is the variable in the MRCOG Transportation Model. When MRCOG calibrated the Transportation Model, it based the calibration on the Day Division enrollment which counts students who generally go to campus every day. The Evening Division enrollment is very large and includes many students who go to campus only once a week usually in the evening. Inclusion of the Evening enrollment would have unrealistically inflated the TVI enrollment. TABLE 72 summarizes the TVI Day Division projection.

TABLE 72
FORECAST ENROLLMENT FOR TVI
Projection for Day Division

Year	TVI Enrollment
2005	19,338
2010	21,276
2015	22,792
2020	24,147
2025	25,694

Sources: BBER and MRCOG

TVI had three general campuses in 2000 serving their Day Division students. Currently, TVI is constructing a fourth campus. The increases in enrollment were apportioned to the four campuses with much of the increase being allocated to the new campus.

### **APPENDIX A**

## **Data Analysis Subzones for the MRCOG Region**

The Data Analysis Subzone System (DASZ) is displayed on a series of five maps:

Greater Albuquerque Area Bernalillo County Sandoval County Torrance County and Southern Santa Fe County Valencia County Insert Greater Albuquerque Area DASZ map

Insert Bernalillo County DASZ map

Insert Sandoval County DASZ map

Insert Torrance County and Southern Santa Fe County DASZ map

Insert Valencia County DASZ map

#### **APPENDIX B**

# 2000 Socioeconomic Data Set for Data Analysis Subzones (DASZ)

Selected variables from the 2000 Socioeconomic Data Set have been included in this Appendix table. The full data set is available on the MRCOG web site or from MRCOG. This data set was compiled with data from the 2000 Census, U.S. Bureau of the Census, data provided by the New Mexico Department of Labor, and data collected by MRCOG.

## 2000 SOCIOECONOMIC DATA SET BY DATA ANALYSIS SUBZONE (DASZ) FOR THE MID-REGION COUNCIL OF GOVERNMENT

DASZ	Total Population	Total Persons in House- holds	Total House- holds	Total Housing Units	Estimated Single Family Housing Units	Estimated Multi- family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
1011	103	103	32	38	38	0	0	0	0	0
1012	17	17	3	3	3	0	0	0	0	0
1021	0	0	0	0	0	0	0	0	0	0
1022	0	0	0	8	8	0	1	1	147	149
1031	54	54	23	33	33	0	0	0	0	0
1032	4	4	2	3	3	0	0	0	0	0
1033	1686	1686	621	663	663	0	31	2	5	38
1041	10	10	3	3	3	0	0	0	0	0
1042	0	0	0	0	0	0	0	0	0	0
1051	1455	1455	485	521	521	0	9	0	16	25
1052	1006	1006	352	376	376	0	1450	124	140	1714
1061	280	110	42	61	61	0	44	4	101	149
1071	0	0	0	0	0	0	0	0	0	0
1072	253	253	90	95	95	0	17	1	6	24
1081	0	0	0	0	0	0	0	0	0	0
1082	0	0	0	0	0	0	0	0	21	21
1091	0	0	0	0	0	0	0	0	0	0
1092	0	0	0	0	0	0	0	0	0	0
1093	0	0	0	0	0	0	0	0	0	0
1101	507	507	150	172	172	0	0	0	2	2
1151	3713	3713	1455	1545	1545	0	19	6	143	168
1152	0	0	0	0	0	0	0	0	0	0
1153	23	23	9	10	10	0	1	0	1	2
1154	111	111	38	41	41	0	0	0	0	0
1161	0	0	0	0	0	0	0	0	0	0
1162	0	0	0	0	0	0	0	0	0	0
1163	0	0	0	0	0	0	0	0	0	0
1164	0	0	0	0	0	0	0	0	0	0
1171	0	0	0	0	0	0	0	0	5	5
1181	0	0	0	0	0	0	0	0	0	0
1182	6	6	1	2	2	0	0	0	21	21
1183	39	39	13	13	13	0	1	0	1	2
1184	3	3	1	1	1	0	0	0	0	0
1191	398	398	141	145	145	0	6	1	10	17
1192	306	306	107	111	111	0	4	1	177	182
1193	286	286	85	93	93	0	46	1	107	154
1194	129	129	39	40	40	0	0	0	5	5
1195	0	0	0	1	1	0	206	1	9	216
1201	1708	1708	588	604	604	0	3	2	7	12
1202	1506	1506	533	548	548	0	16	2	28	46
1203	1842	1842	663	681	681	0	91	564	542	1197
1221	1554	1554	522	535	535	0	38	2	9	49

	200	00 Socioeco Total Persons	onomic Data	a Set by Data A	Estimated	one for the Mi Estimated Multi-	d-Region Cou	Region Council of Governments			
DASZ	Total Population	in House- holds	Total House- holds	Total Housing Units	Single Family Housing Units	family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment	
1222	461	461	191	196	196	0	657	143	226	1026	
1223	2913	2913	978	1014	1014	0	227	12	208	447	
1231	4	4	3	3	3	0	1	1	113	115	
1232	0	0	0	0	0	0	5	3	357	365	
1233	0	0	0	0	0	0	0	0	0	0	
1241	6	6	2	5	5	0	0	0	0	0	
1251	138	138	38	43	43	0	0	0	0	0	
1252	74	74	23	25	25	0	0	0	0	0	
1261	64	64	15	18	18	0	0	0	0	0	
1262	156	156	47	54	54	0	0	0	0	0	
1263	1106	1106	393	416	416	0	2	1	4	7	
1301	2069	2069	734	781	708	73	4	12	13	29	
1301	923	923	330	345	340	5	20	2	4	26	
1302	826	826	299	306	306	0	11	1	4	16	
1303	754	754	261	274	256	18	9	1	19	29	
1351	1369	1369	485	535	480	55	172	11	22	205	
1353	2330	2330	786	819	759	60	25	65	14	104	
	649										
1354		649	210	218	218	0	20	1	30	51	
1371	98	98	32	33	33	0	3	0	0	3	
1372	1840	1840	619	636	636	0	18	2	15	35	
1373	1416	1416	502	515	423	92	2	2	12	16	
1374	3384	3384	1152	1187	1187	0	35	255	238	528	
1375	1185	1185	530	578	396	182	13	4	108	125	
1401	329	329	96	101	101	0	1	0	12	13	
1402	1086	1086	365	391	204	187	11	405	110	526	
1403	1882	1882	845	906	608	298	53	9	139	201	
1404	1198	1198	606	679	398	281	45	602	680	1327	
1451	7	7	4	4	4	0	457	12	86	555	
1452	3123	2998	1152	1186	1186	0	34	6	119	159	
1453	1629	1392	808	953	342	611	10	5	290	305	
1501	170	130	100	241	0	241	165	583	453	1201	
1502	0	0	0	0	0	0	5373	284	293	5950	
1511	914	914	415	439	395	44	167	433	722	1322	
1512	1966	1962	672	693	693	0	23	53	194	270	
1513	964	952	343	356	349	7	6	2	51	59	
1521	0	0	0	0	0	0	22	85	51	158	
1522	39	39	11	11	11	0	29	76	214	319	
1523	9	9	3	3	3	0	0	0	30	30	
1531	255	255	75	81	81	0	6	0	3	9	
1532	164	164	50	50	50	0	77	0	9	86	
1533	0	0	0	0	0	0	0	0	0	0	
1541	0	0	0	0	0	0	1	0	107	108	
1542	31	31	11	12	12	0	0	0	16	16	
1543	0	0	0	0	0	0	0	0	0	0	
1551	79	79	23	28	28	0	0	0	0	0	
1552	143	143	49	52	52	0	0	0	0	0	

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Total House-House-Housing Housing Employ-DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Employ-Total House-Housing Employ-House-Housing Housing Employ-Employ-DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Total House-Employ-House-Housing Housing Employ-Employ-DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Employ-Employ-Employ-Total House-Housing House-Housing Housing Employ-DASZ Population holds holds Units Units Units ment ment ment ment 2.7 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-Housing House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 2.14 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Total House-House-Housing Housing Employ-DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single Total Total Family family Basic Retail Service Total Employ-Employ-Employ-Employ-Total House-Housing House-Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-House-Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

	200	0 Socioeco Total	onomic Data	a Set by Data	Analysis Subze Estimated	one for the Mi Estimated	d-Region Cou	ncil of Goverr	nments	
	Total	Persons in House-	Total House-	Total Housing	Single Family Housing	Multi- family Housing	Basic Employ-	Retail Employ-	Service Employ-	Total Employ-
DASZ	Population	holds	holds	Units	Units	Units	ment	ment	ment	ment
7032	1574	1571	634	642	421	221	158	607	443	1208
7041	182	182	91	104	94	10	239	235	638	1112
7042	1133	1133	467	492	482	10	144	416	225	785
7043	1495	1495	617	650	623	27	65	219	223	507
7044	13	13	5	6	6	0	822	748	444	2014
7051	2944	2942	1209	1461	0	1461	455	86	738	1279
7052	6	6	3	3	3	0	1624	1377	1151	4152
7053	7	7	3	3	3	0	164	469	1262	1895
7101	2152	2152	1192	1322	298	1024	70	297	398	765
7102	494	494	319	356	0	356	72	599	368	1039
7103	1190	1190	501	556	269	287	52	74	1164	1290
7104	1278	1278	476	483	483	0	12	121	60	193
7105	1933	1933	958	1019	561	458	52	33	286	371
7106	1901	1901	935	982	694	288	31	95	133	259
7107	2270	2270	1252	1532	221	1311	95	438	559	1092
7111	1176	1176	603	662	662	0	288	79	524	891
7112	5	5	2	3	3	0	378	6	1002	1386
7113	893	893	414	432	361	71	29	6	255	290
7114	1486	1473	675	710	710	0	28	42	654	724
7115	1541	1528	605	632	462	170	57	129	122	308
7116	1275	1275	507	583	583	0	8	37	150	195
7110	952	952	328	335	335	0		107	37	149
7121	1310	1297	328 470	333 477	333 477	0	5 1245	79	308	1632
						0				
7123	1268	1147	443	454	454		23	6	189	218
7124	1473	1470	527	540	540	0	9	6	157	172
7125	1384	1384	560	573	573	0	26	6	53	85
7126	0	0	0	0	0	0	4	2	407	413
7133	2032	2032	971	1046	739	307	36	12	186	234
7134	2045	2045	764	794	730	64	58	8	97	163
7135	2439	2417	1322	1496	279	1217	256	634	432	1322
7136	907	907	333	337	337	0	14	3	74	91
7141	1475	1475	639	673	673	0	16	6	74	96
7142	1441	1441	534	547	547	0	18	5	43	66
7143	2109	2109	669	683	683	0	41	6	57	104
7144	78	78	24	27	27	0	3	11	1	15
7145	590	527	220	289	136	153	23	3	66	92
7151	1029	1029	541	575	118	457	51	633	346	1030
7152	1418	1415	621	652	408	244	45	6	105	156
7153	1420	1410	605	639	495	144	21	34	150	205
7154	1262	1262	527	535	535	0	90	42	609	741
7155	902	902	457	484	401	83	29	270	694	993
7156	1525	1525	609	629	629	0	13	6	41	60
7157	736	619	235	243	243	0	18	109	397	524
7161	1649	1649	609	635	635	0	14	9	167	190
7162	317	317	97	102	102	0	29	1	10	40
7163	103	103	29	31	31	0	8	0	1	9

	200	0 Socioeco Total Persons	onomic Data	a Set by Data A	Analysis Subzo Estimated Single	one for the Mi Estimated Multi-	d-Region Cou	ncil of Goverr	nments	
DASZ	Total Population	in House- holds	Total House- holds	Total Housing Units	Family Housing Units	family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
7164	655	655	260	279	279	0	6	9	37	52
7165	273	273	124	127	127	0	42	1	15	58
7166	757	757	356	386	136	250	7	97	48	152
7171	808	808	465	514	95	419	11	187	200	398
7172	2563	2563	1208	1283	721	562	48	256	330	634
7173	2846	2846	1564	1720	441	1279	45	43	630	718
7174	1634	1634	656	696	481	215	22	7	70	99
7175	1382	1382	495	506	506	0	45	5	63	113
7176	1264	850	474	490	490	0	7	6	146	159
7177	1938	1938	876	939	628	311	27	10	115	152
7201	1826	1826	644	683	683	0	926	134	254	1314
7201	106	106	40	43	43	0	61	187	40	288
7202	294	294	129	137	137	0	2	187	6	200
7204	360	360	143 79	144	144	0	8	1	32	41
7221	251	251		81	81	0	0	1	4	5
7222	245	245	76 72	77	77	0	9	1	21	31
7223	223	223	72	75	75	0	20	0	89	109
7224	351	351	140	146	146	0	13	2	96	111
7225	650	650	245	256	256	0	11	6	31	48
7226	297	297	92	93	93	0	5	1	10	16
7231	0	0	0	0	0	0	0	17	0	17
7241	0	0	0	0	0	0	209	4	12	225
7242	34	34	11	11	11	0	4	0	0	4
7251	117	117	34	34	34	0	2	0	3	5
7252	252	252	72	72	72	0	25	1	16	42
7253	1109	1109	352	356	356	0	25	6	18	49
7254	1631	1631	594	633	310	323	36	112	282	430
7255	894	894	274	281	281	0	7	4	132	143
7261	333	333	96	102	102	0	9	1	6	16
7262	189	189	56	57	57	0	4	0	4	8
7263	192	192	50	54	54	0	7	0	6	13
7264	548	548	168	174	174	0	98	1	21	120
7311	2299	2299	1019	1068	1020	48	28	240	140	408
7312	1119	1119	468	481	481	0	25	45	138	208
7321	1802	1802	876	1053	607	446	26	12	68	106
7331	1589	1589	592	612	594	18	60	175	83	318
7401	740	740	318	330	237	93	10	106	44	160
7402	903	856	612	773	0	773	30	569	1107	1706
7403	1131	1120	508	524	467	57	61	133	271	465
7411	1532	1518	558	577	571	6	29	6	31	66
7412	1468	1468	647	695	444	251	64	257	174	495
7421	1438	1438	629	687	330	357	10	43	377	430
7423	2474	2474	1045	1115	878	237	75	305	643	1023
7424	1328	1313	515	528	520	8	46	92	145	283
7425	1082	1078	453	490	423	67	83	399	436	918
7426	1181	1181	475	490	490	0	43	201	351	595

	200	O Socioeco Total Persons	onomic Data	a Set by Data A	Analysis Subzo Estimated Single	one for the Mi Estimated Multi-	d-Region Cou	ncil of Goverr	nments	
DASZ	Total Population	in House- holds	Total House- holds	Total Housing Units	Family Housing Units	family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
7431	1586	1586	664	692	558	134	92	12	264	368
7432	1376	1376	526	564	413	151	33	272	369	674
7433	1413	1346	732	851	272	579	179	39	276	494
7434	1221	1196	454	460	454	6	51	159	345	555
7435	1918	1911	988	1106	340	766	27	170	406	603
7436	639	561	442	554	0	554	174	452	912	1538
7441	2669	2619	1152	1210	767	443	112	171	519	802
7442	2886	2825	1086	1145	967	178	39	337	551	927
7442	1698	1698	725	788	491	297	17	21	162	200
7444	1073	1073	458	476	457	19	23		36	65
7444	2381	2381	901	919	891	28	62	6 146	340	548
7451	1604	1604	630	660	561	99	119	239	285	643
7452	1428	1428	574	592	492	100	85	91	282	458
7453	1722	1722	745	798	425	373	22	60	89	171
7454	1518	1515	602	622	511	111	52	7	153	212
7455	1265	1261	604	651	444	207	9	20	39	68
7456	880	880	332	340	340	0	22	3	19	44
7461	1722	1711	775	966	456	510	73	227	363	663
7462	1678	1670	669	689	634	55	11	114	111	236
7463	1644	1639	613	645	524	121	62	260	347	669
7464	1335	1316	579	610	420	190	150	163	508	821
7501	1296	1296	535	578	386	192	24	9	180	213
7502	0	0	0	0	0	0	1	45	44	90
7503	1113	1113	435	444	444	0	18	107	94	219
7511	1282	1279	498	509	509	0	43	94	270	407
7512	1344	1336	559	583	559	24	91	59	193	343
7521	1232	1232	520	536	536	0	46	178	201	425
7522	1675	1660	636	650	645	5	46	114	351	511
7531	1709	1699	852	969	379	590	23	169	355	547
7532	1556	1556	634	663	452	211	38	110	148	296
7533	1367	1367	640	688	327	361	13	10	1038	1061
7534	2793	2787	1296	1450	299	1151	30	121	109	260
7551	746	746	280	290	248	42	10	60	77	147
7552	954	952	435	462	267	195	12	217	288	517
7553	2345	2345	911	969	525	444	93	14	217	324
7554	2109	2109	834	905	679	226	45	42	129	216
7561	142	142	64	66	66	0	50	642	586	1278
7562	1882	1870	702	721	707	14	22	239	121	382
7571	1240	1240	470	488	455	33	34	142	219	395
7572	2062	2062	798	832	775	57	63	321	98	482
7601	942	939	371	382	380	2	64	319	705	1088
7602	1084	1079	473	502	466	36	84	389	373	846
7603	1243	1243	515	546	465	81	142	202	427	771
7611	1891	1891	715	745	740	5	59	133	130	322
7612	940	932	452	484	163	321	40	142	915	1097
7621	1321	1309	552	563	563	0	37	31	317	385
, 021	1321	1507	332	505	203	3	51	51	517	505

	200	Total	onomic Data	a Set by Data A	Estimated	Estimated	d-Region Cou	ncil of Goverr	nments	
DASZ	Total Population	Persons in House- holds	Total House- holds	Total Housing Units	Single Family Housing Units	Multi- family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
7622	1032	1032	519	574	277	297	44	151	488	683
7631	1122	1119	485	501	456	45	24	17	63	104
7632	876	876	373	400	268	132	85	299	566	950
7633	1749	1742	759	843	354	489	63	334	174	571
7634	697	697	274	297	243	54	13	52	312	377
7641	1283	1283	611	631	464	167	38	182	562	782
7642	921	909	359	368	349	19	134	195	693	1022
7652	1043	1043	432	449	449	0	21	188	423	632
7661	189	110	100	101	0	101	23	9	1412	1444
7662	1724	1718	738	774	609	165	53	98	346	497
7681	0	0	0	0	0	0	28	2777	800	3605
7682	0	0	0	0	0	0	28	1	281	284
7683	127	127	89	99	0	99	141	48	2143	2332
7684	675	675	588	722	0	722 0	156	9	588	753
7685	0	0	0	0	0		81	278	1088	1447
7691	151	151	96	146	24	122	135	87	1265	1487
7692	655	511	221	231	231	0	63	111	161	335
7693	0	0	0	0	0	0	0	0	0	0
7694	0	0	0	0	0	0	0	0	0	0
7695	0	0	0	0	0	0	66	1775	672	2513
7696	895	895	584	643	0	643	13	6	41	60
7701	372	372	154	158	158	0	15	70	128	213
7702	0	0	0	0	0	0	0	0	0	0
7711	1182	1182	461	472	433	39	10	141	303	454
7712	1501	1501	567	568	568	0	13	6	42	61
7713	1811	1805	707	723	723	0	27	19	71	117
7721	2452	2442	1053	1099	774	325	43	11	125	179
7722	1262	1262	479	486	486	0	44	5	37	86
7723	1078	1066	393	413	344	69	18	6	112	136
8001	15	6	3	3	3	0	103	282	609	994
8002	419	311	186	220	3	217	277	9	1436	1722
8011	1935	119	52	52	43	9	91	53	5654	5798
8012	466	387	335	381	0	381	74	45	7504	7623
8021	724	618	415	496	59	437	40	63	294	397
8022	1065	875	497	539	291	248	34	220	1082	1336
8031	1782	1671	1023	1163	274	889	74	245	4888	5207
8032	11	10	1	1	1	0	4	3	565	572
8041	2767	2753	1630	1831	534	1297	82	615	442	1139
8051	13	13	2	2	0	2	279	12	2372	2663
8052	487	487	175	200	0	200	6	5	607	618
8061	1178	1115	505	582	307	275	46	69	451	566
8062	2786	2786	1274	1404	522	882	89	99	625	813
8071	2	2	1	1	0	1	38	5	140	183
8072	779	767	295	315	275	40	6	4	306	316
8081	41	41	20	22	22	0	367	154	1298	1819
8082	1102	1102	351	367	330	37	329	26	2887	3242

	200	00 Socioeco Total Persons	nomic Data	a Set by Data A	Analysis Subzo Estimated Single	one for the Mi Estimated Multi-	d-Region Cou	ncil of Goverr	nments	
DASZ	Total Population	in House- holds	Total House- holds	Total Housing Units	Family Housing Units	family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
8101	2390	2390	1113	1187	964	223	109	93	541	743
8102	1479	1479	752	818	471	347	56	133	128	317
8111	1806	1806	812	836	822	14	17	49	206	272
8121	1248	1248	569	583	504	79	17	11	91	119
8122	1258	1258	570	601	460	141	78	78	201	357
8123	267	267	189	237	59	178	19	120	381	520
8131	1282	1282	621	651	499	152	360	253	415	1028
8132	1179	1179	497	517	517	0	49	45	354	448
8133	1179	11/9	1	2	2	0	186	8	1074	1268
8141	1038	1028	473	512	444	68	131	426	433	990
8142	1513	1513	650	695	510	185	27	21	161	209
8151	1782	1732	877	968	664	304	115	236	1389	1740
8161	2092	1868	1050	1162	360	802	222	513	1227	1962
8171	1040	1040	493	524	499	25	38	373	475	886
8172	1629	1571	810	861	694	167	108	194	165	467
8201	1146	1146	512	537	417	120	37	186	649	872
8202	821	813	356	366	366	0	74	27	62	163
8211	1457	1440	690	746	413	333	113	281	1086	1480
8212	341	341	194	200	48	152	77	323	965	1365
8221	3	3	2	2	2	0	34	113	359	506
8231	1486	1484	566	737	216	521	21	53	267	341
8232	1221	1221	483	510	468	42	25	220	619	864
8233	2633	2633	882	1072	401	671	61	278	239	578
8234	1887	1861	634	792	279	513	222	324	213	759
8241	861	795	504	530	0	530	8	6	339	353
8242	4253	3903	1239	1554	318	1236	40	36	125	201
8243	1133	1106	555	619	75	544	45	154	318	517
8244	2519	2519	959	1148	698	450	169	14	162	345
8251	372	356	221	234	24	210	614	98	674	1386
8252	0	0	0	0	0	0	2	264	12	278
8261	1691	1688	795	843	843	0	1384	249	275	1908
8262	1976	1976	704	796	542	254	53	57	89	199
8263	1730	1730	624	680	538	142	71	188	162	421
8271	454	454	239	272	272	0	137	361	109	607
8272	1538	1538	552	595	406	189	193	139	176	508
8273	831	831	481	504	504	0	45	911	113	1069
8281	5454	5447	2404	2649	1312	1337	246	569	445	1260
8282	1748	1568	828	943	199	744	103	315	509	927
8301	2755	2755	1086	1141	1141	0	16	12	204	232
8311	3027	3027	1318	1370	1354	16	111	32	211	354
8312	351	351	175	195	195	0	3	3	207	213
8313	233	233	101	106	106	0	101	1	11	113
8401	0	0	0	0	0	0	113	25	7	145
8402	0	0	0	0	0	0	786	20	59	865
8411	543	532	154	187	97	90	6648	34	0	6682
8412	0	0	0	0	0	0	1037	242	1231	2510

2000 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated

DASZ	Total Population	Persons in House- holds	Total House- holds	Total Housing Units	Single Family Housing Units	Multi- family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
9261	271	271	106	118	118	0	0	60	5	65
9271	1460	1460	497	566	566	0	73	1	20	94
9281	1344	1344	480	589	589	0	189	1	12	202
9291	385	385	127	148	148	0	84	1	2	87
9301	680	680	238	300	300	0	64	1	3	68
9311	1778	1254	460	567	562	5	97	15	735	847
9321	181	181	72	88	88	0	107	1	2	110
9331	39	39	13	13	13	0	0	0	0	0
9341	109	109	39	47	47	0	50	0	1	51
9351	251	251	104	129	129	0	1	8	5	14
9361	75	75	27	28	28	0	0	0	0	0
9401	1082	1082	408	578	578	0	8	5	13	26
9411	112	112	50	58	58	0	0	0	0	0
9421	211	211	85	103	103	0	119	1	8	128
9431	1235	1235	496	592	573	19	84	48	139	271
9441	151	151	60	82	82	0	139	1	12	152
9451	51	51	24	29	29	0	0	0	1	1
9501	101	101	43	57	57	0	0	0	1	1
9511	52	52	16	35	35	0	3	25	1	29
9521	94	94	43	70	70	0	1	3	4	8
9531	97	97	45	79	79	0	31	0	2	33
Total	738714	725497	284198	309297	240498	68799	120619	71399	200417	392435

### **APPENDIX C**

# Forecast 2025 Socioeconomic Data Set for Data Analysis Subzones (DASZ)

Selected variables from the 2025 Socioeconomic Data Set have been included in this Appendix table. The full data set is available on the MRCOG web site or from MRCOG. This data set was compiled by the Mid-Region Council of Governments.

## 2025 SOCIOECONOMIC DATA SET BY DATA ANALYSIS SUBZONE (DASZ) FOR THE MID-REGION COUNCIL OF GOVERNMENT

DASZ	Total Population	Total Persons in House- holds	Total House- holds	Total Housing Units	Estimated Single Family Housing Units	Estimated Multi- family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
1011	330	330	107	123	123	0	0	0	0	0
1012	154	154	62	66	66	0	0	0	0	0
1021	0	0	0	0	0	0	0	0	0	0
1022	5963	5635	2293	2506	2506	0	299	106	883	1288
1031	622	622	254	281	281	0	0	1	3	4
1032	8691	8691	3547	3933	3933	0	74	120	870	1064
1033	6487	6487	2483	2764	2746	18	71	58	142	271
1041	975	975	397	433	433	0	88	74	384	546
1042	5327	5244	2127	2333	2118	215	152	124	1076	1352
1051	7221	7221	2496	2794	2741	53	38	40	166	244
1052	3771	3613	1310	1459	953	506	1899	350	1545	3794
1061	2353	2102	831	921	722	199	153	92	497	742
1071	606	606	227	264	264	0	1	1	23	25
1072	4027	4004	1476	1636	1499	137	60	49	495	604
1081	10	10	4	4	4	0	14	3	58	75
1082	481	481	187	196	196	0	12	3	73	88
1091	5876	5876	2187	2370	2370	0	51	160	927	1138
1092	175	175	68	71	71	0	24	5	106	135
1093	5443	4899	1908	1999	1999	0	27	8	1074	1109
1101	1108	1108	340	406	406	0	0	0	4	4
1151	3723	3723	1514	1586	1586	0	19	6	144	169
1152	0	0	0	0	0	0	0	0	110	110
1153	1292	1292	517	555	555	0	2	1	11	14
1154	267	267	95	109	109	0	0	0	0	0
1161	231	127	52	55	55	0	13	15	163	191
1162	237	237	92	96	96	0	3	7	38	48
1163	178	178	70	73	73	0	1	0	2	3
1164	1104	1104	473	496	496	0	24	20	275	319
1171	1691	1423	574	632	632	0	14	43	339	396
1181	175	175	71	79	79	0	0	0	2	2
1182	251	251	102	111	111	0	18	51	189	258
1183	470	418	170	187	187	0	7	34	101	142
1184	84	84	35	37	37	0	0	2	7	9
1191	603	603	222	239	239	0	6	2	11	19
1192	452	452	164	172	172	0	12	18	272	302
1193	639	639	198	225	225	0	51	3	231	285
1194	454	454	143	153	149	4	33	0	156	189
1195	1705	1705	1	1	620	0	223	35	227	485
1201	1705	1705	610 520	639	639	0	3	2	7	12
1202 1203	1472	1472	539	565 692	565 692	0	16 164	2 799	28 862	46 1825
	1769	1769	660 525			0			862	1825
1221	1509	1509	525	549	549	0	38	2	9	49

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Single Multiin Total Total Family family Basic Retail Service Total Employ-Employ-Employ-Employ-Total House-House-Housing Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-Housing House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-House-Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Single Multiin Total Total Family family Basic Retail Service Total Housing Housing Housing Employ-Employ-Employ-Employ-Total House-House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-Housing House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Housing Employ-Employ-Employ-Employ-Total House-House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-Housing House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Housing Employ-Employ-Employ-Employ-Total House-House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Housing Employ-Employ-Employ-Employ-Total House-House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-House-Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Employ-Total House-House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

Total Estimated Estimated Multi-Persons Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-House-Housing Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Housing Employ-Employ-Employ-Total House-House-Housing Employ-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Employ-Employ-Employ-Employ-Total House-Housing House-Housing DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments Total Estimated Estimated Persons Multi-Single in Total Total Family family Basic Retail Service Total Housing Housing Housing Employ-Employ-Employ-Employ-Total House-House-DASZ Population holds holds Units Units Units ment ment ment ment 

2025 Socioeconomic Data Set by Data Analysis Subzone for the Mid-Region Council of Governments
Total Estimated Estimated

DASZ	Total Population	Total Persons in House- holds	Total House- holds	Total Housing Units	Estimated Single Family Housing Units	Estimated Multi- family Housing Units	Basic Employ- ment	Retail Employ- ment	Service Employ- ment	Total Employ- ment
9261	260	260	109	126	126	0	4	60	40	104
9271	2620	2620	956	1127	1127	0	74	1	45	120
9281	2215	2215	849	1058	1058	0	189	1	43	233
9291	523	523	185	223	223	0	84	1	22	107
9301	845	845	317	414	414	0	64	1	25	90
9311	2175	1470	578	734	721	13	99	23	1270	1392
9321	228	228	98	125	125	0	107	1	12	120
9331	49	49	17	17	17	0	2	0	8	10
9341	133	133	51	64	64	0	50	0	7	57
9351	352	352	156	199	199	0	1	8	14	23
9361	91	91	35	37	37	0	0	0	3	3
9401	1338	1338	542	793	793	0	8	5	44	57
9411	140	140	66	80	80	0	0	0	3	3
9421	267	267	116	147	147	0	119	1	31	151
9431	1388	1365	588	725	700	25	84	47	313	444
9441	148	148	63	91	91	0	139	1	26	166
9451	47	47	23	29	29	0	0	0	1	1
9501	94	94	43	59	59	0	0	0	1	1
9511	50	50	16	35	35	0	3	23	39	65
9521	92	92	45	74	74	0	1	3	15	19
9531	115	115	57	99	99	0	31	0	7	38
Total	1075238	1048609	433696	471676	370592	101084	131785	93697	326083	551565

#### APPENDIX D

## Population, Housing and Employment Change by Subareas of the MRCOG Region

Summary Tables for 2000, 2005, 2010, 2015, and 2025

Locator Map for Subareas is displayed in FIGURE 6 in Part 1

2000 socioeconomic data and forecast data for the four forecast years through 2025 have been summarized by the Subareas of the MRCOG Region. Data for these tables has been compiled by MRCOG. Due to rounding, the actual DASZ data that is summarized in these tables may vary slightly from the control totals that were presented in the methodology parts of this report.

Summary of 2000 Socioeconomic Data by Subareas of the MRCOG Region

			Summ	ary or 20	UU DUCIU	COHOIIIC	Data by	Subarca	to or the	MICOU	rtegion			
		D	T-4-1	A	Persons	T-4-1	Single	Multi-	Di-	D -4-i1	Ci	T-4-1	Enroll-	Enroll-
	T-4-1	Persons	Total	Average	Not in	Total	Family	family	Basic	Retail	Service	Total	ment in Public	ment in UNM and
Cuharaa	Total Population	in House- holds	House- holds	House- hold Size	House- holds	Housing Units	Housing Units	Housing	Employ-	Employ-	Employ-	Employ-	Schools	TVI
Subarea	15691	15521	5558	2.793	170	5895	5895	Units 0	ment 1945	ment 710	ment 1497	ment 4152	2546	0
2	37307	36889	13780	2.793	418	14722	12568	2154	7742	3073	4975	15790	7361	0
3	6658	6658	2552	2.609	0	2710	2640	70	257	202	433	892	562	0
4	11176	11176	4199	2.662	0	4509	4357	152	736	628	1474	2838	2558	0
5	25565	25421	9920	2.563	144	10589	7425	3164	700	5517	3701	9918	4268	0
6	781	142	57	2.303	639	60	60	0	26	72	165	263	0	0
7	44245	43470	16158	2.690	775	16995	14628	2367	727	1474	3857	6058	5236	0
8	26249	26178	8914	2.937	71	9577	7964	1613	3194	1903	2364	7461	5520	0
9	1545	1545	394	3.921	0	487	487	0	38	21	127	186	0	0
10	28543	28446	8546	3.329	97	9271	9039	232	1089	273	1208	2570	2286	0
11	32066	31956	10572	3.023	110	11253	10485	768	1293	1175	3199	5667	8522	2000
12	15529	15488	6017	2.574	41	6457	6031	426	3309	1680	2396	7385	2994	0
13	6230	6078	2471	2.460	152	2627	2162	465	18924	2954	16315	38193	379	0
14	89030	88030	38047	2.314	1000	41021	27507	13514	7872	8668	19203	35743	10364	4265
15	24226	23463	9335	2.513	763	9956	8640	1316	8150	2555	6202	16907	4583	0
16	109278	108684	46538	2.335	594	49667	34300	15367	12173	19133	35768	67074	21142	0
17	20897	19052	8720	2.185	1845	9880	5965	3915	7864	3256	24243	35363	4812	0
18	41762	38951	19260	2.022	2811	21097	12203	8894	4567	5077	38831	48475	5477	34545
19	57066	56035	24286	2.307	1031	27222	14767	12455	4773	7039	16690	28502	4142	0
20	9145	9063	2742	3.305	82	2976	2791	185	5246	367	1660	7273	911	0
21	6	6	3	2.000	0	3	3	0	5	0	56	61	0	0
22	4757	4317	1444	2.990	440	1650	1343	307	22542	424	1270	24236	1436	0
23	17557	17525	6772	2.588	32	7423	7339	84	649	358	1210	2217	1883	0
24	2201	2201	740	2.974	0	863	851	12	94	18	1247	1359	200	0
25	965	965	313	3.083	0	341	341	0	147	1	30	178	0	0
26	65187	63816	22368	2.853	1371	24302	23178	1124	3921	3481	7249	14651	13248	1574
27	19076	18969	5322	3.564	107	7030	6937	93	553	298	2924	3775	2366	0
28	16911	16387	6024	2.720	524	7257	7147	110	1431	753	1771	3955	4227	0
29	9065	9065	3146	2.881	0	3457	3445	12	652	289	352	1293	1232	0
Total	738714	725497	284198	2.553	13217	309297	240498	68799	120619	71399	200417	392435	118255	42384
		ha Cancus Na												

Sources: U.S. Bureau of the Census, New Mexico Department of Labor, and MRCOG

Summary of 2005 Socioeconomic Data by Subareas of the MRCOG Region

			Summa	ary of 20	02 200100	economic	Data by	Subarea	as of the	MINCOG	Region			
	T. 4.1	Persons	Total	Average	Persons Not in	Total	Single Family	Multi- family	Basic	Retail	Service	Total	Enroll- ment in	Enroll- ment in
~ .	Total	in House-	House-	House-	House-	Housing	Housing	Housing	Employ-	Employ-	Employ-	Employ-	Public	UNM and
Subarea	Population	holds	holds	hold Size	holds	Units	Units	Units	ment	ment	ment	ment	Schools	TVI
1	26972	26536	9548	2.779	436	10314	9915	399	2456	1098	2316	5870	2866	0
2	39348	38741	14606	2.652	607	15878	13709	2169	7928	3062	5238	16228	6371	0
3	7865	7865	3025	2.600	0	3262	3192	70	269	207	450	926	620	0
4	13387	13387	5154	2.597	0	5618	5466	152	881	706	1704	3291	3425	0
5	35968	35824	13936	2.571	144	14826	11272	3554	1087	6544	5739	13370	5188	300
6	2784	145	59	2.458	2639	62	62	0	454	123	601	1178	0	0
7	48565	47790	18066	2.645	775	18999	16609	2390	970	2294	4962	8226	4305	0
8	27546	27475	9535	2.881	71	10255	8538	1717	3138	1891	2769	7798	5885	0
9	1678	1678	412	4.073	0	488	488	0	45	59	328	432	0	0
10	39532	39435	12254	3.218	97	13223	12991	232	1098	289	1406	2793	3310	0
11	32051	31941	10748	2.972	110	11425	10600	825	1259	1185	3313	5757	7807	2205
12	16144	16103	6362	2.531	41	6794	6193	601	3212	1709	2534	7455	3015	0
13	8715	8515	3471	2.453	200	3679	3046	633	19295	3709	17763	40767	461	0
14	93104	92027	40458	2.275	1077	43373	29475	13898	7969	9769	23027	40765	9815	4703
15	24691	23928	9694	2.468	763	10320	8940	1380	8165	2694	6929	17788	4462	0
16	108882	108276	47272	2.290	606	50299	34618	15681	11999	19538	37340	68877	19773	0
17	20920	19886	9343	2.128	1034	10424	6111	4313	7859	3456	26439	37754	4322	0
18	42078	38867	19557	1.987	3211	21237	12314	8923	4543	5373	40369	50285	6037	39608
19	59027	57925	25578	2.265	1102	28253	15420	12833	4906	7333	18073	30312	4973	0
20	9482	9400	2904	3.237	82	3138	2859	279	5726	481	2293	8500	907	0
21	6	6	3	2.000	0	3	3	0	6	0	56	62	0	0
22	4231	3791	1282	2.957	440	1448	1191	257	22757	450	1526	24733	1287	0
23	18140	18108	7116	2.545	32	7732	7648	84	668	415	1428	2511	2217	0
24	2393	2393	810	2.954	0	932	920	12	94	63	2276	2433	413	0
25	1009	1009	331	3.048	0	365	365	0	160	1	50	211	0	0
26	75506	74016	26194	2.826	1490	28817	27681	1136	4380	3805	7977	16162	12991	1878
27	20955	20848	5905	3.531	107	7838	7745	93	1085	711	4591	6387	6020	0
28	19524	18959	7051	2.689	565	8728	8593	135	1486	839	2526	4851	5871	0
29	11360	11360	3989	2.848	0	4538	4526	12	670	425	520	1615	1535	0
Total	811863	796234	314663	2.530	15629	342268	270490	71778	124565	78229	224543	427337	123876	48694
1000	011000	770201	011000	2.000	1002)	0.12200	270170	71770	12 1000	1022)	22 10 10	12/00/	120070	1007

Summary of 2010 Socioeconomic Data by Subareas of the MRCOG Region

Subarea Populat  1 39° 2 400 3 8° 4 144° 5 444° 6 39° 7 599 8 28° 9 18°	38     39161       10     39774       28     8728       36     14846       03     43508       50     1311       15     58398       53     28400       38     1888	Total House- holds 14452 15255 3375 5788 17180 524 22692 10094 501	Average House- hold Size 2.710 2.607 2.586 2.565 2.532 2.502 2.574 2.814	Persons Not in House- holds 577 836 0 90 695 2639 1217	Total Housing Units 15694 16611 3663 6345 18390 552	Single Family Housing Units 15282 13983 3593 6177 13608	Multi- family Housing Units 412 2628 70 168	Basic Employ- ment 3004 8005 294 942	Retail Employ- ment 1519 3338 247 765	Service Employ- ment 4818 5778 550 1901	Total Employ- ment 9341 17121 1091 3608	Enrollment in Public Schools 3860 6464 626	Enroll-ment in UNM and TVI 0 0
Subarea         Populat           1         39°           2         400           3         8°           4         149           5         442           6         39°           7         590           8         28°	on holds 38 39161 10 39774 28 8728 36 14846 03 43508 50 1311 15 58398 53 28400 38 1888	holds 14452 15255 3375 5788 17180 524 22692 10094	hold Size  2.710  2.607  2.586  2.565  2.532  2.502  2.574	holds 577 836 0 90 695 2639	Units 15694 16611 3663 6345 18390	Units 15282 13983 3593 6177 13608	Units 412 2628 70 168	ment 3004 8005 294	ment 1519 3338 247	ment 4818 5778 550	ment 9341 17121 1091	Schools 3860 6464 626	TVI 0 0
1 39° 2 400 3 8° 4 149 5 442 6 39° 7 590 8 28°	38     39161       10     39774       28     8728       36     14846       03     43508       50     1311       15     58398       53     28400       38     1888	14452 15255 3375 5788 17180 524 22692 10094	2.710 2.607 2.586 2.565 2.532 2.502 2.574	577 836 0 90 695 2639	15694 16611 3663 6345 18390	15282 13983 3593 6177 13608	412 2628 70 168	3004 8005 294	1519 3338 247	4818 5778 550	9341 17121 1091	3860 6464 626	0
2 400 3 8' 4 149 5 442 6 39 7 590 8 28:	10     39774       28     8728       36     14846       03     43508       50     1311       15     58398       53     28400       38     1888	15255 3375 5788 17180 524 22692 10094	2.607 2.586 2.565 2.532 2.502 2.574	836 0 90 695 2639	16611 3663 6345 18390	13983 3593 6177 13608	2628 70 168	8005 294	3338 247	5778 550	17121 1091	6464 626	0
3 8 4 149 5 442 6 39 7 596 8 283	28     8728       36     14846       03     43508       50     1311       15     58398       53     28400       38     1888	3375 5788 17180 524 22692 10094	2.586 2.565 2.532 2.502 2.574	90 695 2639	3663 6345 18390	3593 6177 13608	70 168	294	247	550	1091	626	
4 144 5 442 6 39 7 596 8 283	36 14846 33 43508 50 1311 15 58398 53 28400 88 1888	5788 17180 524 22692 10094	2.565 2.532 2.502 2.574	90 695 2639	6345 18390	6177 13608	168						0
5 442 6 39 7 590 8 283	03 43508 50 1311 15 58398 53 28400 88 1888	17180 524 22692 10094	2.532 2.502 2.574	695 2639	18390	13608		942	765	1901	2600		
6 39 7 590 8 283	50 1311 15 58398 53 28400 88 1888	524 22692 10094	2.502 2.574	2639			4700					3387	0
7 596 8 285	15     58398       53     28400       38     1888	22692 10094	2.574		552		4782	1167	7138	8113	16418	6068	1857
8 28:	53 28400 88 1888	10094		1217		552	0	614	172	1760	2546	0	0
	38 1888		2 814	121/	23789	20609	3180	1070	2659	7175	10904	4456	0
9 18		501	2.014	153	10852	9119	1733	3182	1986	3731	8899	6164	0
	22 47900	501	3.768	0	612	612	0	52	200	1334	1586	0	0
10 482	22 4/090	15536	3.083	332	16784	15908	876	1136	436	2497	4069	3899	0
11 332	02 33092	11387	2.906	110	12027	11202	825	1299	1439	4130	6868	7583	2249
12 16	16105	6506	2.475	41	6935	6307	628	3226	1782	2687	7695	2969	0
13 10	16 9857	4084	2.414	289	4302	3664	638	19594	4258	20881	44733	492	0
14 942	79 93202	41834	2.228	1077	44887	30606	14281	8034	10171	24623	42828	9588	4797
15 252	52 24499	10151	2.413	763	10758	9199	1559	8220	2820	7476	18516	4268	0
16 1083	53 107747	48246	2.233	606	51334	35027	16307	12094	19798	39096	70988	18596	0
17 21	96 20162	9652	2.089	1034	10764	6321	4443	7979	3593	28940	40512	4085	0
18 410	70 38344	19740	1.942	3326	21438	12462	8976	4617	5616	42355	52588	5354	42690
19 588	38 57786	26110	2.213	1102	28895	15757	13138	5099	7596	19993	32688	4728	0
20 90		3055	3.148	82	3282	3002	280	5819	569	3018	9406	862	0
21	6 6	3	2.000	0	3	3	0	6	0	474	480	0	0
22 30	29 3189	1101	2.896	440	1245	988	257	22794	461	1751	25006	1184	0
23 203		8177	2.490	32	8824	8740	84	679	479	2003	3161	3233	0
24 25		876	2.916	0	999	987	12	94	71	2487	2652	400	0
	52 1062	354	3.000	0	390	390	0	155	1	52	208	0	0
26 850		30250	2.775	1724	33221	31570	1651	4706	4327	8958	17991	14351	2384
27 222		6310	3.499	197	8389	8238	151	1103	765	5202	7070	5772	0
28 210		7953	2.642	677	9844	9691	153	1560	841	2925	5326	5724	0
29 13		4922	2.798	0	5594	5563	31	664	597	728	1989	1601	0
Total 8803		346108	2.491	18039	376423	299160	77263	127208	83644	255436	466288	125714	53977

**Summary of 2015 Socioeconomic Data by Subareas of the MRCOG Region** 

			Summa	ary of 20	13 30010	economic	: Data by	<i>Subarea</i>	is of the	WINCOG	Region			
	T 4 1	Persons	Total	Average	Persons Not in	Total	Single Family	Multi- family	Basic	Retail	Service	Total	Enroll- ment in	Enroll- ment in
~ .	Total	in House-	House-	House-	House-	Housing	Housing	Housing	Employ-	Employ-	Employ-	Employ-	Public	UNM and
Subarea	Population	holds	holds	hold Size	holds	Units	Units	Units	ment	ment	ment	ment	Schools	TVI
1	53201	52332	19632	2.666	869	21346	20834	512	3245	1769	6848	11862	6087	0
2	42227	41283	15991	2.582	944	17432	14380	3052	8074	3462	6671	18207	5860	0
3	9336	9336	3623	2.577	0	3946	3876	70	302	291	741	1334	1120	0
4	15923	15821	6201	2.551	102	6828	6660	168	967	827	2151	3945	3432	0
5	48059	47303	18937	2.498	756	20265	14333	5932	1192	7108	8676	16976	5924	3373
6	4265	1569	624	2.514	2696	657	657	0	858	196	2159	3213	0	0
7	64196	62796	24752	2.537	1400	25997	22201	3796	1415	3220	9638	14273	5487	0
8	29299	28964	10453	2.771	335	11202	9421	1781	3319	2204	4799	10322	5183	0
9	2055	2055	554	3.709	0	678	678	0	55	223	1613	1891	0	0
10	59940	59540	20655	2.883	400	22143	20684	1459	1382	820	3984	6186	6181	0
11	37130	37009	12933	2.862	121	13674	12589	1085	1403	1751	5098	8252	7782	2249
12	16635	16590	6807	2.437	45	7264	6600	664	3187	1873	3080	8140	2766	0
13	10348	9919	4172	2.378	429	4402	3739	663	19521	4420	22913	46854	484	0
14	96147	94858	43001	2.206	1289	46092	31348	14744	8028	10273	26143	44444	9418	4797
15	25949	25052	10551	2.374	897	11195	9507	1688	8183	2962	8444	19589	4147	0
16	107806	107052	48983	2.185	754	52142	35046	17096	11909	19582	40513	72004	17932	0
17	22042	20918	10205	2.050	1124	11392	6385	5007	7842	3594	29726	41162	4022	0
18	41542	37920	19840	1.911	3622	21586	12482	9104	4674	5787	44385	54846	5138	42862
19	60441	58962	26761	2.203	1479	29578	15877	13701	5223	7612	21384	34219	4698	0
20	9756	9666	3127	3.091	90	3365	3079	286	5860	621	3539	10020	924	0
21	2463	2319	929	2.496	144	977	771	206	113	126	1041	1280	0	0
22	3701	3261	1154	2.826	440	1303	988	315	22742	456	1807	25005	1169	0
23	21613	21579	8801	2.452	34	9511	9427	84	724	573	2338	3635	3205	0
24	2697	2697	936	2.881	0	1067	1055	12	96	79	2660	2835	400	0
25	1127	1127	380	2.966	0	419	419	0	155	1	58	214	0	0
26	96202	94254	34362	2.743	1948	37719	35835	1884	4953	4855	9734	19542	14681	2668
27	23694	23471	6732	3.486	223	8977	8794	183	1120	794	5725	7639	5665	0
28	23476	22737	8707	2.611	739	10773	10606	167	1623	847	3219	5689	5223	0
29	16206	16206	5861	2.765	0	6659	6619	40	660	794	966	2420	2786	0
Total	947476	926596	375664	2.467	20880	408589	324890	83699	128825	87120	280053	495998	129714	55949
- 0041	717170	720070	075007	2.10/	20000	10000	021070	00077	120023	0/120	<b>200000</b>	1,5,70	14/117	557 17

Summary of 2025 Socioeconomic Data by Subareas of the MRCOG Region

	Total opulation 77230 47940 9591 18527	Persons in House- holds 75419 46888 9591	Total House- holds 28889 18542	Average House- hold Size 2,611	Persons Not in House- holds	Total Housing	Single Family Housing	Multi- family	Basic	Retail	Ci	m . 1	Enroll-	Enroll-
Subarea Pop	77230 47940 9591	holds 75419 46888	holds 28889	hold Size		_		-			Service	Total	ment in	ment in
1 2	77230 47940 9591	75419 46888	28889		holds			Housing	Employ-	Employ-	Employ-	Employ-	Public	UNM and
	47940 9591	46888		2.611		Units	Units	Units	ment	ment	ment	ment	Schools	TVI
	9591		18542		1811	31570	30436	1134	3572	2236	11507	17315	8657	0
3		9591		2.529	1052	20001	16194	3807	8156	3724	8245	20125	6537	0
	18527		3785	2.534	0	4176	4106	70	308	309	861	1478	1144	0
4		18425	7421	2.483	102	8303	8075	228	994	910	2579	4483	3746	0
5	54241	52922	21731	2.435	1319	22977	15890	7087	1381	7281	10337	18999	6005	3802
6	18676	15493	6720	2.306	3183	7002	5615	1387	2941	2020	7156	12117	2874	0
7	75089	72829	29915	2.435	2260	31465	24897	6568	1802	3816	11580	17198	6462	0
8	33406	32710	12374	2.643	696	13280	10328	2952	3967	2963	7294	14224	5599	0
9	2438	2438	670	3.639	0	823	823	0	59	225	1835	2119	0	0
10	70184	69336	24719	2.805	848	26531	23505	3026	1681	1276	5359	8316	6496	0
11	38279	38157	13595	2.807	122	14406	13312	1094	1409	1879	5775	9063	8374	2535
12	17804	17758	7403	2.399	46	7922	7106	816	2967	1861	3725	8553	2892	0
13	11137	10588	4660	2.272	549	4934	3810	1124	18332	4497	26018	48847	494	0
14	99871	98270	45922	2.140	1601	49092	32083	17009	7555	10167	28912	46634	9687	5408
15	25919	25008	10775	2.321	911	11460	9626	1834	7624	2847	9929	20400	4199	0
16	106703	105741	49414	2.140	962	52711	35074	17637	10879	18691	43127	72697	17976	0
17	22645	21493	10745	2.000	1152	12001	6515	5486	7286	3558	31383	42227	4250	0
18	42625	38891	20968	1.855	3734	22884	12481	10403	4535	5601	46322	56458	5212	43773
19	60385	58490	27132	2.156	1895	30058	15982	14076	4987	7372	22940	35299	4690	0
20	9893	9802	3244	3.022	91	3496	3210	286	5714	756	4513	10983	841	0
21	9511	9283	4321	2.148	228	4546	2860	1686	2804	1230	4748	8782	556	0
22	3704	3256	1031	3.158	448	1164	861	303	22736	457	2135	25328	1188	0
23	24186	24048	9977	2.410	138	10796	10712	84	953	881	3122	4956	3676	0
24	3054	3054	1061	2.878	0	1206	1194	12	106	80	3205	3391	418	0
25	1252	1252	433	2.891	0	477	477	0	143	12	58	213	0	0
	117341	114932	42892	2.680	2409	47038	44523	2515	5436	6097	11163	22696	16637	2792
27	26710	26487	7754	3.416	223	10368	10168	200	1146	847	7024	9017	5841	0
28	26318	25470	9983	2.551	848	12340	12136	204	1665	862	3717	6244	5707	0
29	20579	20578	7620	2.701	1	8649	8593	56	647	1242	1514	3403	3127	0
	1075238	1048609	433696	2.418	26629	471676	370592	101084	131785	93697	326083	551565	143285	58310